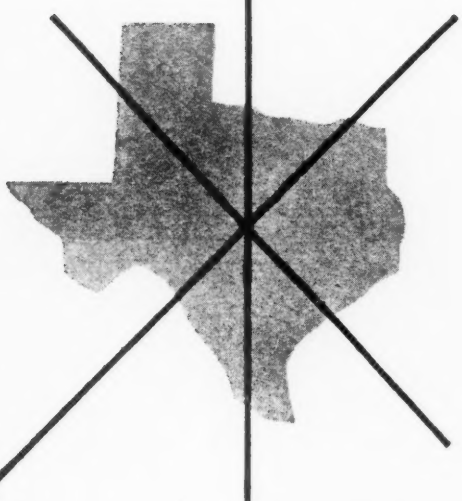
TEXAS BUSINESS REVIEW

BUREAU OF BUSINESS RESEARCH : THE UNIVERSITY OF TEXAS

A Monthly Summary of Business and Economic Conditions in Texas

JUNE 1961
VOL. XXXV, NO. 6
$3.00 A YEAR



By A. P. Beutel — The Industrialization of the South

By James R. Kay — Gold and Balance of Payments Deficits

By Ralph L. Day — Business Games Without Computers

Editor ..... John R. Stockton

Managing Editor ..... James J. Kelly

BUSINESS RESEARCH COUNCIL

John Arch White, Dean of the College of Business Administration (*ex officio*); John R. Stockton; Jessamon Dawe; J. Neff; G. H. Newlove; W. T. Tucker; and E. W. Walker.

BUREAU OF BUSINESS RESEARCH

John R. Stockton, *Director*
Stanley A. Arbingast, *Associate Director Resources Specialist*
Florence Escott, *Assistant to the Director*
Francis B. May, *Statistician*
Marjorie Cornwell, *Administrative Assistant*
Charles O. Bettinger, *Junior Statistician*
Alfred G. Dale, *Research Associate*
James J. Kelly, *Research Associate*
Ida M. Lambeth, *Research Associate*
Marie Fletcher, *Research Associate*
Ruth Ashcroft, *Research Associate*
Roberta Steele, *Cartographer*
Margaret Smith, *Senior Secretary*
Cynthia Lee, *Senior Secretary*
Claire S. Howard, *Senior Clerk Typist*
Josephine Knippa, *Senior Clerk Typist*
Anna Merle Danz, *Library Assistant*
Marilyn C. Whites, *Senior Clerk Typist*
Mildred Anderson, *Statistical Assistant*
Jane A. Bowen, *Statistical Assistant*
Eva A. Arias, *Statistical Technician*
Elnora W. Mixson, *Statistical Technician*
Robert Dorsett, *Offset Press Operator*
Daniel P. Rosas, *Offset Press Operator*

Cooperating Faculty

Calvin Patton Blair, *Associate Professor of International Trade*
Charles T. Clark, *Assistant Professor of Business Statistics*
John Lymberopoulos, *Instructor in Business Statistics*
Robert H. Ryan, *Special Instructor in Business Writing*

Assistants

Nell Abell; Jean S. Claunch; Mary Blanche Fanett; Joe H. Jones; Fredolin J. Kaderli; Alfred C. Mitchell; Richard D. Sanders; Elizabeth R. Turpin.

TEXAS BUSINESS REVIEW

VOL. XXXV, NO. 6 JUNE 1961

THIS MONTH'S ARTICLES

The Business Situation in Texas 3
The Industrialization of the South 5
The Changing Face of Texas Agriculture 8
Business Games Without Computers 12
Home Financing: 1961 Policies and Programs 14
Gold and Balance of Payments Deficits 16

THIS MONTH'S TABLES

Selected Barometers of Texas Business 4
Selected Crops Harvested in Texas 9
Selected Livestock on Texas Farms 10
Rail Shipments of Livestock 11
Retail Sales Trends by Kinds of Business 13
Net Short-term Liabilities of the United States 17
Local Business Conditions 19
Barometers of Texas Business 28

THIS MONTH'S CHARTS

Service Employment in Texas 3
Average Weekly Earnings, Texas Manufacturing 3
Building Construction in Texas 15
Newspaper Advertising Linage 18

Published monthly by the Bureau of Business Research, College of Business Administration, The University of Texas Austin 12. Second-class postage paid at Austin, Texas. Content of this publication is not copyrighted and may be reproduced freely. Acknowledgment of source will be appreciated. Subscription, $3.00 a year; individual copies, 25 cents.

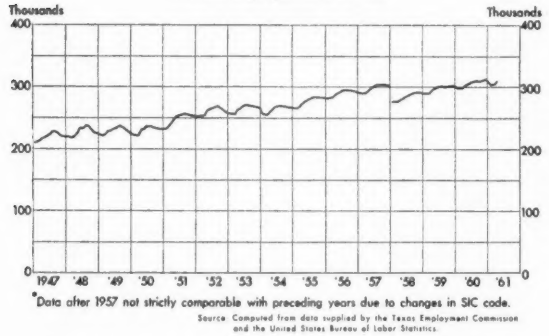
The Business Situation in Texas

By FRANCIS B. MAY

The seasonally adjusted Index of Texas Business Activity dropped 6% in April to a rate of 224% of the 1947–49 average rate of activity. At this level it was a fraction of a percentage point above the April 1960 value. Part of the decline was a reaction from the effect of an early Easter, which pushed a large volume of retail sales into March. Some of it was due to the effects of bad weather on agriculture. After taking these factors into account it is still apparent that we are in the initial phase of cyclical recovery.

A comparison of the average value of the index for the first four months of 1961 with the same period of 1960 eliminates the effect of changing dates for Easter as well as some of the other sources of erratic variation. The index has averaged 2% higher during the first four months of this year than during the first four months of 1960. Since the business revival is being felt largely in the area of manufactures of durable goods and Texas has a relatively small durables manufacturing industry, our rate of upward progress is necessarily slow. In former years, Texans relied upon expansion of its oil industry to provide a vigorous upthrust. The oil industry no longer serves this requirement. Only nine days production was allowed by the Railroad Commission in April.

Service Employment in Texas



*Data after 1957 not strictly comparable with preceding years due to changes in SIC code.

Source: Computed from data supplied by the Texas Employment Commission and the United States Bureau of Labor Statistics.

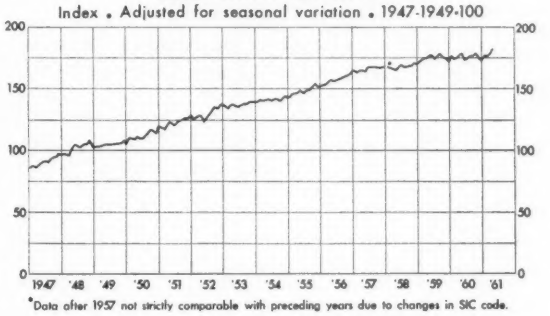
Crude petroleum production in April was unchanged from March after adjustment for seasonal influences. At 106.8% of the 1947–49 average the index was 1% below its April 1960 value. The number of days production allowed was the same in both months. The year-to-year drop of 1% was undoubtedly due to a minor variation in actual production of existing wells due to shutdowns for maintenance and other causes for individual wells. For the first four months of 1961 the index averaged 107.3% compared with 113.1% for the same period of 1960. This decline represents a 5.1% drop below 1960, a serious deflationary factor in the economy of the state. Under the circumstances, the average gain of 2% in over-all economic activity registered by the comprehensive Index of Texas Business Activity is quite exceptional.

Texas has two rapidly growing industries: natural gas production and petrochemicals. Natural gas production employs great amounts of capital but relatively little labor. Petrochemicals plants employ more labor, but it is an area that is increasingly heavily automated. Investment per worker is large. It remains to be seen whether this industry will rank as high in number of employees as the oil producing industry. Data from the 1958 Censuses of Manufactures and of Mineral Industries show total employment of 42,166 for the chemical industry and 129,803 for petroleum and natural gas extraction. In the latter category, relatively few workers are engaged in natural gas extraction.

Crude oil runs to stills in April rose 1% over March after adjustment for seasonal factors. At 152% of the 1947-49 average the index was 3% above April 1960. Gasoline inventories have been declining since the first week in April but still are rather high. A good summer demand due to vacations should alleviate the situation provided runs are held down.

Average Weekly Earnings, Texas Manufacturing Industries

Index • Adjusted for seasonal variation • 1947-1949=100



*Data after 1957 not strictly comparable with preceding years due to changes in SIC code.

Source: Computed from data supplied by the Texas Employment Commission and the United States Bureau of Labor Statistics.

Total electric power consumption rose 7% in April after seasonal adjustment. The rise in industrial power consumption was even greater at 10%. At 389% and 377% of the 1947–49 average the indexes of total and of industrial power consumption were 1% and 9%, respectively, below the year ago levels.

Ordinary life insurance sales declined 2% in April on a seasonally adjusted basis to a level 7% below April of last year. The index has shown weakness during the first four months of this year after making a very strong showing in 1960.

Insured unemployment in Texas in April dropped 3.9% of average covered employment. The figure is not adjusted for seasonal variation. In April 1960 insured unemployment was 3.1%.

The April insured unemployment figure was slightly more than half the U. S. average of 7.0%. It was the fourth lowest rate for any of the fifty states and the District of Columbia. Only Nebraska, South Dakota, and the District of Columbia had lower rates.

Miscellaneous freight carloadings rose 7% in April after adjustment for seasonal influence. At 81% of the 1947–49 average volume the April value of the index was 2% below April 1960.

Construction in Texas

The seasonally adjusted index of Texas urban building permits issued in April dropped 17% below the previous month. At 96.6% of the 1957–59 average the index was 1% below its April 1960 value. The decline was due almost entirely to a drop in the value of nonresidential permits issued.

Because of a strong tendency for building permits to be issued in bunches rather than at a uniform rate, the index of total permits is subject to rather wide erratic swings. This strong erratic variation is also due to the fact that permits are for items of large value. A difference of only two or three permits can mean a large change in total value of permits; and the index is based upon value of permits rather than on the number of permits issued.

An examination of the index of total value of permits for the past sixteen months shows a gradual upward movement that is too strong to be masked completely by the month-to-month erratic variations. This upward movement began at the end of a gradual decline that lasted from the middle of 1958 to the first quarter of 1960.

The seasonally adjusted index of value of residential permits issued in April declined 1% below March. It was 3% below April of last year. The decline was concentrated in permits for one-family dwellings and for large apartment buildings. Permits for duplexes and for three to four family apartment buildings rose.. The value of April permits for duplexes was 66% above March. Nationally, seasonally adjusted permits for new private housing declined 11% in April.

The seasonally adjusted index of value of nonresidential permits issued in April declined 34% below March. At 99.9% of the 1957–59 average the index was 5% above April 1960. The average value of nonresidential permits for the first four months of this year was 20% above the average for the first four months of 1960. This high monthly average was enough to push the average value of total residential and nonresidential permits 1% above the 1960 average for the same period.

The April decline in nonresidental permits was concentrated in the area of permits for places of amusement, office-bank buildings, public works and school buildings. The month-to-month decline in educational building permits was particularly heavy.

During the past decade the number of students enrolled in schools and colleges in the nation has increased 16 million to a 1960 total of 46 million young people. The number in high school exceeded 10 million for the first time in 1960. Between 1950 and 1960 college and professional school enrollment increased 61.2% to 3.6 million. The cost of educating so large a portion of the total population is enormous. It will continue to grow.

Texas Retail Trade

The seasonally adjusted index of total retail sales in Texas in April dropped 4% below its March value of 104.1% of the 1957–59 average. At 99.8% of the base-period figure it was 9% below April of last year. Easter came early this year, pushing a large volume of sales of new apparel forward in March. The result was an unusually high volume of March apparel sales and a consequent decline in April. We need a calendar that fixes the occurrence of holidays, such as Easter so that they do not wander back and forth from year to year, affecting monthly comparisons of economic data. There is an internatonal movement for calendar reform, but it has made little progress to date.

SELECTED BAROMETERS OF TEXAS BUSINESS

Index	Apr 1961	Mar 1961	Apr 1960	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
	(1947–49=100)				
Texas business activity	224	239	223	— 6	**
Miscellaneous freight carloadings in S.W. district	81	76	83	+ 7	— 2
Crude petroleum production	106.8*	106.8*	108.2r	**	— 1
Crude oil runs to stills	152	150	147	+ 1	+ 3
Total electric power consumption	389*	363*	394r	+ 7	— 1
Industrial power consumption	377*	343*	413r	+ 10	— 9
Bank debits	267	286	267	— 7	**
Ordinary life insurance sales	376	383	403	— 2	— 7
Total retail sales (1957–59=100)	99.8	104.1	109.9	— 4	— 9
Durable-goods sales (1957–59=100)	93.3	97.2	105.2	— 4	— 11
Nondurable-goods sales (1957–59=100)	103.1	107.6	112.3	— 4	— 8
Urban building permits issued (1957–59=100)	96.7	115.9	97.3	— 17	— 1
Residential (1957–59=100)	93.8	94.6	97.2	— 1	— 3
Nonresidential (1957–59=100)	99.9	151.1	95.0	— 34	+ 5
Total industrial production	175	175	174	**	+ 1
Average weekly earnings manufacturing	181.4	178.6	178.1	+ 2	+ 2

Adjusted for seasonal variation.
* Preliminary.
r Revised.
** Change is less than one-half of one percent.

The 4% decline in total retail sales was matched by a decline of the same magnitude in sales of both durable and nondurable goods. Durable goods sales in April, at 93.3% of the base-period value were 11% below April, 1960. Sales of hardware and furniture stores were the only durable goods categories to resist the downward pressures. Hardware store sales showed a month-to-month increase of 4%. Furniture store sales held steady at the March level. Automotive stores, farm implement dealers and lumber and building material dealers had greater than seasonal declines in sales volume.

In the nondurable goods area, food stores and service stations had no more than the usual seasonal declines in volume of business. Apparel stores had an unusually heavy drop in sales in April. Drug stores had a slightly larger than seasonal decline, as did restaurants. Florists were among the few categories of sellers of nondurable goods who enjoyed a March to April increase in business.

Nationally retail sales in April dropped 1% to just under $18 billion. The decline was felt in most major lines of trade. Sales of durables fell 1% to $5.5 billion. Sales of nondurables fell to $12.4 billion, showing a month-to-month decline of 1.6%.

April personal income rose to an annual rate of $410.3 billion after taking seasonal factors into account. This was slightly above the old high value of $409.7 billion for October of last year. Most of the gain was in wage and salary payments as factory payrolls increased for the second consecutive month. Greater than seasonal increases in employment and hours worked per week were responsible for the April gain in factory payrolls.

The Industrialization of the South

By A. P. BEUTEL
Vice-President, Dow Chemical Company, Texas Division

The industrialization of the southern United States parallels very closely the story of the growth of the chemical industry. When Spindletop blew in on January 10, 1901, from a hill near Beaumont, oil became an industry. Spindletop was drilled into a salt dome. This salt dome, and others eagerly sought for, held the key to great raw material sources for the chemical industry—hydrocarbons, salt, and sulphur.

Spindletop represented the beginning of liquid fuel. It created the power of mass transportation. Spindletop put America on wheels and in the air. The rest of the world followed America's lead. But recognition and development of this source of wealth for the chemical industry were slow to come over the next 30 years. These raw materials were destined to change a way of life. Their end products were to make life more livable in our nation and in the world.

The development of the oil industry in the South, along the Gulf Coast, in East Texas, in the Panhandle, in Oklahoma, and later in Louisiana progressed slowly. Uses for oil and gas were not developing as rapidly as their production.

Oil continued to be a drug on the market especially after the discovery in 1929 and 1930 of the great East Texas oil field. In the rush to produce oil, many wasteful practices were instituted. To end this waste, the Texas Railroad Commission ruled that casinghead gas could no longer be flared in order to produce oil. This made conservation mandatory, and saner development and production of oil and gas followed.

Between 1930 and 1940, Dow Chemical was caught up in this turn of events. A subsidiary had been formed—an oil field service company that had developed and put into operation a process for increasing the production of oil and gas wells by chemical means.

In those days, East Texas, West Texas, the Panhandle, Oklahoma, and Louisiana were literally set afire. In the Panhandle, gas was used to evaporate salt water by impinging open gas flames on the surface of brine ponds—a most inefficient method—merely to claim for the benefit of the Railroad Commission, that beneficial use was being made of casinghead gas. Oil for which there was a market was thereby being produced.

Gas was flared in the oil fields of Texas in such quantities that it was possible to read a newspaper in the middle of the night along almost any highway.

In East Texas oil wells were being drilled at Kilgore and Henderson. These were typical goldrush towns in those hectic days. Oil was being produced at such tremendous rates that the casinghead gas vents from the oil and gas separators made a deafening roar over which a shouting conversation could hardly be heard. This went on for days and days. One of the nation's most valuable and irreplaceable resources, natural gas, was lost for the benefit of mankind forever.

In the decade between 1930 and 1940, the chemical industry and other industries had shown a steady, peacetime growth. The demand for products had not reached the stage where new areas of development were being sought. The United States officially entered the war on December 8, 1941 and the market for solvents and other chemical products multiplied. Older chemical processes had to be supplanted by newer and more efficient methods. This challenge of reduced overseas sources and tremendous demand led to the development of the petrochemical industry.

In the period 1935 to 1939 Dow Chemical Company was making studies of plant sites in the South, from the Mexican border to Florida. The company already had moved southward to the Carolinas with a seawater plant for the extraction of bromine to be used by the Ethyl Corporation in antiknock gasoline. Dow also had a small iodine plant in Louisiana. An oilfield service subsidiary, Dowell, Inc., had stations in the oil and gas producing states of the South and Southwest. Although much unfavorable comment was current about Southern labor, Southern tenant farmers, textile workers of the Carolinas, and the "Okies" of the Dust Bowl, management's impressions of the South were entirely different. Everywhere people were found of high calibre and enterprise. The only thing slow about them was their manner of speech.

There were many advantages to be found. The climate was distinctly favorable. The recreational opportunities and the manner of living were eye-openers to those who moved from North to South. The South had good highways so that the workers thought little of driving 50 to 60 miles to work. Plentiful supplies of water and choice acreage of land in wide open spaces existed in many places. In addition to all of these advantages, there were raw materials in abundance.

Raw Materials and Production

Volume production requirements being made on industry required a move and that move was South—for raw materials, space, and people. The chemical industry had once again to go to the ocean for more bromine for antiknock fluids for gasoline. The warmer waters of the Gulf and the raw materials required looked better in Texas.

The demand for magnesium metal increased. It was necessary to tap the unlimited supply that existed in the waters of the Gulf, to dredge the oyster shells from the coastal bays, and to produce the power from low-priced gas.

Synthetic rubber was in demand to replace the unobtainable natural rubber of the East Indies. Queen Wilhelmina visited President Roosevelt to persuade him that science should be halted in order to save the natural rubber markets for her colonies. But the source of rubber had, by reason of war's necessity, moved to the factories of the South. Synthetic rubber became an industrial fact.

Synthetic fibers in competition with cotton, wool and linen were being developed. New and better quality materials were being announced each day, such as nylon, Dacron, Orlon, etc., and these were being developed in the South from the monomer, to the polymer, to the fiber, staple and yarns, and then spun and woven in Southern mills. The textile industry involving cotton and wool had

been moving southward for a decade, but with the synthetic fiber developments in the South, textiles were to see their permanent home move from the North to the South.

Aluminum demand had increased to the point where aluminum manufacturers were moving to the water transportation of the Gulf, the raw materials of the South, and nearer to the bauxite from the Southern Hemisphere.

Pesticides and crop savers were developed to fight the pests that are the problems of a warm climate. The farmer and rancher had to use these; he could ill afford crop and cattle losses at the higher prices that had developed.

Food processing moved to the Gulf and to the farms and ranches of the South. The fish and shrimp industry in the Gulf Coast really boomed with the advent of quick-freeze methods, the development of the supermarkets and the home freezer, better distribution methods and population growth. Frozen juices boomed citrus growing in Texas, Louisiana, and Florida.

The paper industry was shown the way by Dr. Charles Herty when he developed his process for making paper from the slash pine of the South.

The steel industry in Daingerfield and Houston, Texas and of long standing in the Birmingham, Alabama area saw a significant development in those years.

Phosphate rock from Florida, plus sulphuric acid produced from Southern sulphur to make superphosphates and other fertilizers, gave agriculture a much needed impetus. The fertilizer industry diversified into other chemical products.

During the war, the shipbuilding industry made great strides and shipyards were scattered along the Gulf Coast. Tonnage shipments today from our Gulf Coast ports are impressively close to those of New York and San Francisco.

Southern Population and Environment

From 1930 to 1957, the South's population grew with the nation, but gained in manufacturing population. Manufacturing output value in these years increased 600% as compared to 470% for the United States as a whole. Retail trade increased 500% in the South compared to 380% for the nation.

But where did the people to perform these jobs come from? Amazement has been expressed by many when seeking the answer as to where the South secured its labor force. Because of increased skill and knowledge, by mechanization and by using agricultural chemicals and fertilizers, farm production per man-hour has quadrupled since 1910 and doubled over 1945. Much farm and ranch labor has thus been released for other jobs.

The average employee received double the average wage of the agricultural worker. The productivity of the chemical worker as measured in dollars is estimated to be 5½ times that of the agricultural worker. Oil and chemical workers are better paid than agricultural workers, and their release from the farm and ranch made it possible for industry's requirements to be met. Another source of population was immigration. Of the millions of people who were trained for military service in the South, many returned to the South.

As to science and liberal arts graduates, the number and quality provided by Southern schools have been impressive and a great satisfaction to all of us in industry. Recruiting of technical and other college graduates goes on over a broad area of the country so that you will find graduates from all schools of our nation in the South. A need does exist for more advanced courses leading to Masters' and Doctors' degrees in our Southern universities. Our universities in the South are endeavoring to attract distinguished professors to their faculties.

The role of the trailer should not be overlooked in the development of the South. It was designed for Southern nomad living. Even now when a large construction program is in progress, trailers promptly appear in large numbers.

Since 1945, air conditioning of homes, cars, offices, and shops has increased productivity and comfort. It is now as much a part of Southern life as corn bread and black-eyed peas. Air conditioning has been the great equalizer of the summers of the nation and itself has spawned a major industry in the South.

In the beginning, industry moved South because of low labor costs along the Gulf Coast and throughout the South. This turned out to be a delusion. Wages, boosted by the rates paid by the oil industry, became as high as or higher than in most parts of the United States.

But low-cost raw materials were available to offset this added cost in wages. Southern labor has turned out to be just as productive as Northern labor. The open type of construction which the Southern climate fosters is less costly, makes labor's work easier and more efficient.

Water Transportation

The geographic relation of the South, particularly in respect to the waterways is of extreme importance to the industrial decision of plant location. Gulf Coast locations are evaluated on the basis of manufacturing and raw material costs as opposed to the costs of shipping the finished products to the highly populated areas where they could be consumed. Traditionally, the South has been discriminated against in freight rates. This has long been the justified complaint of the South.

The answer was water transportation—the use of barges on the Intracoastal Canal, the Mississippi and the Ohio Rivers, the use of ships for the East and West coasts, the Caribbean, Europe, and Asia.

Most of the early industrial development took place on and near the coastline. Now industry is pushing inland to other centers of population as the Gulf Coast has been built up. This speaks well for the broader aspects of industry, since it develops new customers within the confines of the Gulf area. The oil companies, the chemical manufacturers, and others that built along and near the waterways, used tankers, cargo vessels and barges to ship their products. It was logical for them to develop and build terminals to unload and hold their products. They built such terminals on the East and West Coasts and along the Mississippi and Ohio Rivers. Each terminal is the equivalent of a new plant location.

The chemical manufacturers ship wet and dry products to the East Coast by barge, tanker, and cargo vessels. At the eastern terminals the dry chemicals are warehoused and the liquids stored in storage tanks. Delivery of the products is made to the nearby customers via rail, truck, or pipelines. The use of water transportation has not been without effect upon the railroads, where the routes can be shown to be competitive. As a result, industries have obtained water-compelled freight rates.

In 1957 after a five-year evaluation of various sites Dow

Chemical Company decided to build a new raw materials-oriented division on the Mississippi River at Plaquemine, Louisiana, just a few miles south of Baton Rouge. One reason for establishing the new division was to provide another large-tonnage production facility in addition to those already existing in Texas, Michigan, and California. It was placed at Plaquemine because of the happy combination of raw materials and water transportation. Many industries, in like manner, are being built along the Mississippi from New Orleans to Baton Rouge and further north along the river. Ocean-going tankers move on the Mississippi as far as Baton Rouge. Barges move to Minneapolis, Chicago, and Pittsburgh.

Energy Requirements

An inexpensive source of energy is an important factor to industrial management in formulating the decision of plant location. In this respect it is worth reiteration that the industrial development of the South, and of much of our nation, was set in motion by Spindletop, the great gusher at Beaumont in 1901. Spindletop, and the flood of fluid petroleum which flowed from the thousands of wells which followed, supplied industry with essential raw materials and yielded low-cost energy.

In the Gulf Coast area, industrial gas is now selling in the range of 15 cents to 20 cents a thousand cubic feet from southern Texas to the eastern border at Orange. Pipeline charges are added at the rate of 2 cents a thousand cubic feet for each 100 miles, thus the price ranges up to 35 cents to 40 cents in New Jersey, Pennsylvania, New York, Michigan, Wisconsin, and Minnesota.

Obviously, the closer a plant is to its fuel supply, the lower are its energy costs. A glance at the oil and gas pipeline map from Texas and Louisiana to New England should be a density indicator of industrial development. Industries are being built alongside these arteries.

The cost of industrial gas on the Atlantic Coast on the basis of BTU's is somewhat higher than coal, and except for the convenience of gas as a fuel, coal should cost less and be more easily available in the North. Gas priced at 1¢ a 1,000 cubic feet is equivalent to 30 cents for a ton of coal so that industrial gas at 40 cents a 1,000 cubic feet is equal to $10 to $12 for a ton of coal, and a barrel of oil based on its BTU value and priced at $2.50 is equivalent to 40 cents a 1,000 cubic feet of gas.

Coal enough for 1,500 years lies in the Midwest and in the North, and shipped by water, it could serve industries of the South for a long time after the oil and gas are presumably gone. Gas may eventually be too valuable to burn under boilers. Utilities and industries on our Southern waterways are even now considering the desirability of building their gas-fired boilers high enough to install coal-burning equipment under them when gas becomes more expensive than coal.

Seven of the southern states still have 70% of the nation's crude oil reserves. The South has 84% of the nation's known gas reserves and 72% of its liquid hydrocarbon reserves. Present-day estimates indicate an available oil and gas reserve for the next 100 years.

However, at arm's length—not too soon attainable at low cost, but within reach—lies atomic energy. This gives Southern manufacturers a feeling of security, something to look forward to in the future in the South when other energy sources may not be so plentiful. It also makes them more daring in planning for the future in their present locations.

Chemicals Illustrate Growth

According to a survey published by the Manufacturing Chemists' Association last year, the chemical industry will have spent $3 billion on privately financed new construction in the period 1959–1961. Of this immense amount of expenditures for new plants, over one-half will be spent in Texas, Louisiana, Tennessee, West Virginia, and Kentucky. The other five states in the top ten are California, New Jersey, Ohio, Michigan, and Illinois, and they will only spend one-sixth of the total.

Consider that chemical production is increasing at about three times the rate of total U. S. industrial production, and the rising of a new colossus becomes evident. Along with the chemical industry, other industries will be developed. In 1970, it is predicted, the chemical industry will be tied with food for the number one position in the United States. Petroleum refining will trail as number two, with electrical machinery and the auto industry in third and fourth places.

Since 1945, research expenditures in the chemical industry have increased eight-fold. The results of this research in terms of plant expansion will call for *lebensraum*. The trend to Southern locations will continue; literally a search for room in the sun.

A similar story could be told of other industries—natural and synthetic textiles, synthetic rubber, aluminum, steel, paper, instruments, food machinery, processors, fabricators and many others.

Why Industry Is Moving South

Several reasons may be enumerated to explain why the South looks attractive to expanding industry. (1) Southern markets are expanding. (2) There is comparatively less competition in the Southern areas. (3) The South has vast resources of low-cost raw materials. (4) There is an adequate labor supply. (5) Labor relations are good in the South. (6) Transportation costs are competitive. Motor truck, rail, barges over inland waterways, and ocean shipping are all available for freight, while rail, bus and air travel are available for personnel. Air travel now brings the cities of the South closer to metropolitan centers than the distance in time used to be from New York to Boston. (7) Utilities are reasonably priced. (8) Banker attitudes are good.

There are two other points, general in nature that should be added to this list. The first is that the generally conservative trend in state and local governments in the South has been a very positive factor in encouraging the inflow of industry. As the South has changed from a natural resources and farming economy to an industrial environment, the state governments have made corresponding changes in the laws to accommodate the new situation. The South is aware that it must closely watch its tax structure. It has seen too many horrible examples elsewhere to tamper with this talisman of its industrial success.

The second point, and one which is extremely important for the future, is the South's strategic location in relation to Mexico, the entire Caribbean area, and South America. Most of the development of the South has been from the Gulf Coast northward, but it will be only a few years until industry will turn and face southward to Latin America—opening new frontiers for raw materials and markets.

The Changing Face of Texas Agriculture

By FREDOLIN J. KADERLI

Striking changes have occurred in the farming and ranching sector of the Texas economy in the past five years as indicated by the preliminary figures just released by the Bureau of the Census in the 1959 *Census of Agriculture.*

The interval 1954–1959 saw many changes in Texas agriculture. Technological changes were responsible for many of the shifting patterns. The number of farms in the state decreased at a record rate, and correspondingly, the size of the average farm increased by more than 25%. There appears to have been a shift in the cattle population from east to west. The number of areas in improved pasturage almost doubled, and areas planted in grain sorghums again increased over the previous census enumeration.

Weather was an important factor affecting agriculture and played an influential part in some of the changes that have occurred. The years 1954–1956 were marked by drought-withered crops and declining livestock numbers as range conditions became progressively worse. The rains came in 1957, frequently in torrential amounts. Many farmers and ranchers saw their dusty fields and pastures turn into a quagmire almost overnight. Since then the weather has approached normal (if such a word could ever be applied to Texas weather.)

Some rainfall comparisons of cities in widely separated parts of Texas will emphasize the difference between the two years, 1956 and 1957. In the Panhandle, Amarillo had 21.24 inches of rain in 1957 as contrasted with only 9.94 inches in 1956. At San Antonio rainfall amounted to a scant 14.31 inches in 1956 (normal 27.02 inches). The following year rainfall measured 48.83 inches, more than triple what it had been the previous year. Rainfall in Abilene in 1956 amounted to slightly less than 10 inches, some 14 inches less than normal for that West Texas city.

But the intervening years were marked by more than just varied weather conditions. The most outstanding changes in Texas agriculture were, of course, the phenomenal rise in land prices and the huge increases in acres of improved pasture in Texas.

In 1954, census enumerators reported 292,947 farms in the state. In 1959 there were 227,054 farms reported, a 22.5% decrease in number from the previous census. Even allowing for the 15,518 reduction in number of farms due to change in the definition of what constitutes a farm, this is a very substantial decrease which must be explained.

As the number of farms decreased, the size of the farm increased. In 1954 the average size of the farm was 497.7 acres. By 1959 this figure had grown to 629.5 acres, a spectacular increase of 131.8 acres per farm in the intervening five years period.

A brief comparison of these figures with those of the U. S. shows a parallel development. The average size farm for the nation as a whole in 1959 was 302.4 acres as contrasted with an average size farm of 242.2 acres five years before. This increase, converted to a percentage change, equals a growth over a five year span of 24.9%. For Texas the increase in size for the *average* farm amounted to 26.5%, slightly more than the national figure.

The number of farms in the U. S. decreased in the past five years as well. Part of this decrease, of course, was caused by a redefinition of what constitutes a farm. The over-all decrease meant that there were 22.6% fewer farms in 1959 than in 1954. This percentage may be compared with the 22.5% decrease in the number of Texas farms—an almost identical drop.

Census Definitions of Farms

To avoid confusion, it is important to note several things about the census definition. First, the Bureau of Census does not distinguish between a farm and ranch classification; all are called farms. Another factor which must be given some consideration is the change in definition as to what constitutes a farm. In the 1954 *Census of Agriculture*, places of three or more acres were counted as farms if the annual value of agricultural products whether for home use or for sale, but exclusive of home-garden products amounted to $150 or more. Places *of less* than three acres were counted as farms only if the annual sales of agricultural products amounted to $150 or more. In actual enumeration, any place with agricultural production (*i.e.*, greenhouses, nurseries, broiler houses, feed lots, etc.,) are counted as farms if they meet the minimum income requirements.

For the 1959 Census of Agriculture, the definition of a farm was based primarily on a combination of "acres in the place" and the estimated value of agricultural products sold. The word "place" was defined to include all land on which agricultural operations were conducted at any time in 1959 under the control or supervision of any one person or partnership. Control may have been exercised through ownership or management, or through a lease, rental, or cropping agreement.

Places of less than ten acres were counted as farms if the estimated sales of agricultural products for the year amounted to at least $250. Places of ten or more acres in 1959 were counted as farms if the estimated sales of agricultural products for the year amounted to at least $50. Places having less than the $50 or $250 minimum estimated sales in 1959 were also counted as farms if they could normally be expected to produce agricultural products in sufficient quantity to meet the requirements of the definition.

The effect of this change in definition has resulted in 232,000 farms in the U. S. being omitted from the 1959 census that would have been included in the enumeration, had not the definition been changed. For Texas 15,518 fewer farms were counted as a result of this definition change.

Since it is possible to account for only a portion of the decreasing number of farms through the census redefinition it becomes obvious that there are other forces at work which must be accounted for, and which are responsible. The primary reason for the decrease appears to be the fact that larger units can be operated more efficiently, which means, generally speaking, a greater return for each dollar invested. Farm machinery is expensive. In many instances the capital expenditure is simply not justified unless sufficient acreage is available to make the purchase of the machinery economically sound. To obtain sufficient acreage, farmers must rent or buy additional land. This has been a contributing factor to the increase in land prices.

Another striking change in Texas agriculture is the growing ability of farmers to harvest greater quantities of agricultural commodities from fewer acres of land. The increasing yields per acre have more than compensated for the acreage which has been taken out of crop production. In 1954 farmers harvested crops from approximately 24.9 million acres of land in Texas. By 1959 the number of acres from which crops were harvested had declined to approximately 22.2 million acres.

There is a clear relationship between the declining acreage harvested and the increase in irrigated lands on farms. As the farmers are able to control moisture conditions by irrigation they are able to raise their per acre yields. The growth of land in irrigation amounted to more than a million acres in the 1954–59 interval. Again, as land is put under irrigation, it also increases the value of the irrigated acreage, helping to account for the rising land prices.

A curious anomaly is that the competition among farmers for additional land to enlarge their units is driving the price of land upwards, even though per acre yields are rising so fast as to require less and less acreage each year.

Another factor which has tended to drive up land prices is, of course, general inflation. Some investors have put their capital into farm land as a hedge against inflation thus competing against farmers for the land and contributing indirectly to an even greater increase in land prices. Some city dwellers have purchased farms in order to have a week-end country place. Others simply take up farming as a hobby and thus have contributed to increasing land prices, especially around large metropolitan centers.

For the moment, however, the national upward spiral of land prices has been halted. An Agriculture Department report on the farm real estate market showed that land values toward the close of 1960 were at the same level as last July 1. There had been a steady upward trend in market values of land since 1941, with only two minor interruptions. Values leveled off with a 250% increase over those prevailing at the start of 1941. A major factor in halting the upturn was uncertainty regarding future federal farm programs. Another factor was a recent increase in interest rates on land mortgages. This discouraged some prospective buyers.

Commercial fertilizer and fertilizing materials were used on 4.6 million acres in Texas in 1954. By 1959 commercial fertilizer and fertilizing materials were being used on 6.1 million acres, an increase of 1.5 million acres in a five year span. The increased use of fertilizer was a significant factor contributing to the increased yield per acre obtained by Texas farmers.

SELECTED CROPS HARVESTED IN TEXAS
1949, 1954, and 1959

Kind	1959	1954	1949
Sorghums:			
Sorghums for all purposes:			
Farms reporting	77,767	98,109	112,061
Acres	7,587,634	7,404,554	4,658,188
Sales:			
Farms reporting	46,515	n.a.	n.a.
Pounds	11,353,167,774	n.a.	n.a.
Small grain:			
Wheat harvested:			
Farms reporting	25,551	21,627*	34,227
Acres	3,031,101	3,022,518*	5,625,259
Bushels	50,525,890	29,062,814*	75,277,232
Sales:			
Bushels	47,660,940	69,536,454*	9,861,335
Other field crops harvested:			
Cotton harvested:			
Farms reporting	80,914	126,014	153,177
Acres	6,133,378	7,513,763	10,574,202
Bales	4,212,861	3,548,337	5,549,667

* For 1954 excludes 123 counties in East Texas.
n.a.: Not available.
Source: Bureau of the Census.

The number of acres of improved pasture jumped from 3.8 million acres in 1954 to 7.1 million acres in 1959. Improved pasture refers to that portion of "other pasture" on which one or more of the following practices have been used: liming, fertilizing, seeding, irrigating, draining, or the clearing of weed or brush growth. The figures are comparable with those for 1954, when the question on improved pasture was asked for the first time. "Other pasture" refers to all land other than woodland and cropland that was used only for pasture or grazing. It includes noncrop open or brush pasture and cutover or deforested land that has been improved and used for pasture.

Since profit margins of farmers and ranchers are being squeezed more and more, it is imperative that they become as efficient as possible in order to obtain a fair return on their capital. By improving their pasture, they hope to make a profit by being able to graze more stock on fewer acres. The same is true of farmers who irrigate, use more fertilizers, and plant hybrids to obtain greater yields per acre. Unfortunately, more efficiency means greater quantities of commodities which depresses prices. Farmers still have to face the vicious cycle of increased production and lower prices.

Facilities and equipment on Texas farms showed advances from 1954. More farms had telephones and deep freezers than ever before. What is really significant however, is the greater number of machines used for farming operations. There were more corn pickers, pick-up balers, and field forage harvesters on Texas farms than ever before in history. Crawler type tractors were more in evidence than during the previous census enumeration. Big crawler type tractors are typically well suited for larger farming operations and can cover a great many acres in one day.

The primary use of crawler tractors, however, is for grading and clearing land, for rootplowing, and other uses. Their increased utilization provides more evidence of the trend toward mechanization on Texas farms.

Livestock and Poultry

In 1959, 181,715 farms reported having cattle and calves. This number was down considerably from the 241,858 units that reported in the 1954 Census. The number of cattle and calves on farms and ranches in the latest enumeration was 8,507,658 as contrasted with the 1954 count of 8,239,905.

While cattle numbers are now on the upturn this was not true several years ago. Drouth conditions as well as low prices were the two main factors in holding down cattle population on Texas farms and ranches.

The drouth was, perhaps, the most serious limiting factor in livestock production. As the months rolled on and it became more and more evident that the needed rains would not be forthcoming, ranchers and farmers began to sell their herds. Some looked to areas of more abundant rainfall whether they might pasture their cattle.

SELECTED LIVESTOCK ON TEXAS FARMS
1950, 1954, and 1959

Kind	1959	1954	1950
Cattle and calves			
Farms reporting	181,715	241,585	276,816
Number	8,507,658	8,239,905	7,825,007
Milk cows			
Farms reporting	82,750	161,296	224,451
Number	506,796	688,888	922,741
Horses and/or mules			
Farms reporting	77,203	113,694	168,226
Number	237,373	300,415	515,951
Hogs and pigs			
Farms reporting	75,640	107,546	153,702
Number	1,160,487	906,324	1,291,773
Sheep and lambs			
Farms reporting	23,786	25,159	22,198
Number	6,070,595	5,733,563	7,750,395

Source: Bureau of the Census.

For several decades there had been a continuing shift in the cattle population from West Texas to East Texas. This was most noticeable during the thirties and forties. But this trend seems to have been arrested, if not changed, in the five year interval between 1954 and 1959.

All counties bordering on the Louisiana and Arkansas state lines showed a loss in cattle population. All counties (with the exception of Morris and Liberty) to their immediate west also had decreases in cattle numbers. Most of the declines were relatively small, and there is some indication that part of this decrease may be attributed to fewer dairy cattle being kept on East Texas farms.

It is an interesting fact that the great majority of Texas cattle and calves are located in the eastern half of the state bounded roughly on the west by the Balcones Fault line. This has not always been true, however. Around the turn of the century the exact opposite appears to have been the case—that is, most of the cattle were located in the western and northern part of the state.

Several High Plains counties had significant increases in cattle population in the past five years. Most notable among those with large increases were Dallam (+18,042), Lubbock (+29,121), and Hall (+12,802).

On the other hand, a great many of the High Plains counties had declining cattle populations. Motley County, which had an indicated cattle population of 40,269 in 1954, decreased to 18,454 in 1959, a decline in numbers of 21,815 in the intervening five year period. Other counties showing substantial declines were Deaf Smith (—11,774), Gaines (—8,162), and Oldham (—8,154).

While cattle numbers remain high in South Texas, several counties in this area showed substantial decreases in the five year period between the last two censuses. Out in far West Texas, all of those counties west of Brewster and Reeves had a decline in cattle population between 1954 and 1959. Brewster County showed an increase of 11,810 head, thus arresting a decline in cattle numbers which had been going on since 1945.

Cattle and calves on farms and ranches in the Gulf Coast Plain, for the most part, were increasing. A few notable exceptions were Harris County (—8,196), Calhoun County (—6,019), and Brazoria County (—15,038).

There are many reasons why some Texas counties are showing decreasing cattle numbers, while others are increasing. But analysis of contributing factors with respect to increase or decrease is complicated by the fact that conditions which seemingly make for an increase in one county are almost identical to those which make for a decrease in another county. For instance, increased irrigation has been said by some to have been the reason for decreases in cattle population in a number of High Plains counties. On the other hand, the abundance of grain sorghum which is partially a result of irrigated farming practices has made cattle feeding a profitable venture with a resulting increase in cattle numbers in several of these counties.

It has been speculated that some of the declines in various counties were influenced by increasing property taxes which make it less profitable to raise cattle. Increased taxes frequently call for a more intensive type of agriculture such as the raising of some cash crop. However, this type of activity has also been severely restricted in recent years by acreage and other governmental restrictions.

Rapidly increasing land prices, especially close to metropolitan centers, frequently make it more profitable for farmers and ranchers to sell their property and invest elsewhere. A corollary of increasing land prices is increasing property taxes. Some farmers might be forced to sell, especially those whose land has been annexed by nearby cities, and this has frequently been the case.

Farmers who put portions of their land in soil bank were committed to leaving their land in soil improving crops for a certain period of time. The exact effect of the soil bank on Texas agriculture is yet to be determined but it should be obvious that it was at least a contributing factor to declines in cattle numbers in some counties.

In 1959, there were 30,140 farms participating in the Soil Bank Conservation Reserve Program. A total of 3,238,491 acres were in the program throughout the state. Farmers received $34,025,056 for placing acreage in this program. The largest county participating in the program in 1959 was Deaf Smith County which had a total of 114,215 acres in the soil bank and for which farmers received a total of $1,028,233 for leaving their land in the soil bank. Deaf Smith is one of those Panhandle counties which had a substantial decline in cattle population between 1954 and 1959.

As might be expected, the number of horses and mules

continued to decline during the five year period between each census. In 1954 only 77,203 farms reported having either horses or mules as contrasted to 113,694 at the time of the previous enumeration. The actual number of 237,373 horses and mules at the time of the last census, compared to 300,415 in 1954.

A smaller number of farms and ranches reported having sheep and lambs in the 1959 census. However, sheep numbers were up by 337,000. This is only part of the story though, because sheepmen had just begun to rebuild their flocks which had been depleted because of several years of scant rainfall. The rebuilding is apparently still going on. The January 1, 1961, estimate of sheep numbers by the Texas Livestock and Crop Reporting Service indicates about 6,159,000 sheep were in the state at that time. This was the smallest increase in the past three years, however.

There were approximately 25% fewer farms reporting having sold chickens and broilers in 1959 than in 1954. Evidently the average size of individual operations had increased to a great extent because 92.6 million chickens (including broilers) were sold in 1959 as contrasted to 59.7 million in 1954.

Crops

Of the three major cash crops in Texas, sorghum grain continued to occupy the largest area with 7.6 million acres being planted in this crop in 1959. Cotton was planted on approximately 6.1 million acres in that year, followed by wheat which was planted on 3.0 million acres.

Acres planted in sorghum grain has been greater in each census year since 1949. The greatest increases have been, of course, in the High Plains area, and particularly in those areas where irrigation is possible. But sorghum grains do well in semi-arid climates and irrigation is not an absolute necessity so the big increases have not really been limited to any one county.

Per acre yields of sorghums has been increasing and last year amounted to 40 bushels per acre. These gains in per acre yields may be attributed to three dominant factors: increased irrigation, and extensive use of hybrids and fertilizer. Unfortunately, this record production has not been enough to offset lower prices so that income from sorghum was actually down from year-earlier estimates.

In terms of acres harvested, cotton is the second largest crop grown in Texas. But in terms of farm cash income it is by far the largest and in fact, consistently accounts for more than 50% of farm cash income for crops. The number of farms on which cotton is grown has been consistently declining and is roughly half what it was in 1949. Acreage has decreased from 10.6 million in 1949 to 7.5 million in 1954 to 6.1 million in 1959. Increasing per acre yields, however, have been more than enough to offset declining acreage allotments.

Of the cash crops, wheat is third in acreage and third in farm cash income for crops. It is one of the few crops that was grown on a greater number of farms in 1959 than in 1954. But the acreage increase was very small; approximately 10,000 acres. Record yields per acre were obtained in 1958 and again in 1960. The current record yield of 22.5 bushels per acre exceeds the previous record of 22.0 bushels set in 1958. Harvested acreage in 1960 was up 10% over that in 1959 and represented a sharp contrast when compared with the difference between the 1959 and 1954 Census.

The National Pattern

A brief summary of changes in agriculture throughout the nation indicate the same general trend as in Texas. The results of the 1959 Census show evidence of a further concentration and specialization of agriculture in the United States. Even without the new definition of a farm, the changes in farm sizes and number between 1954 and 1959 were great. There was a 30% drop in the number of farms selling less than $2,500 worth of products and a 36% increase in those selling $10,000 worth of products or more.

RAIL SHIPMENTS OF LIVESTOCK*

Source: Bureau of Business Research in cooperation with the Agricultural Marketing Service, U.S. Department of Agriculture

Classification	Apr 1961	Mar 1961	Apr 1960	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
	(in carloads)				
TOTAL	5,013	3,138	4,627	+ 60	+ 8
Cattle	4,039	2,625	3,855	+ 54	+ 5
Calves	547	261	477	+110	+ 15
Sheep	427	252	295	+ 69	+ 45
Interstate	4,677	2,984	4,283	+ 57	+ 9
Cattle	3,814	2,524	3,538	+ 51	+ 8
Calves	436	214	450	+104	— 3
Sheep	427	246	295	+ 74	+ 45
Intrastate	336	154	344	+118	— 2
Cattle	225	101	317	+123	— 29
Calves	111	47	27	+136	+311
Sheep	0	6	0	—100	....

* Rail-car basis: cattle, 30 head per car; calves, 60; and sheep, 250.

The number of farms having milk cows decreased 39%; farms having chickens declined 36%; farms raising turkeys went down 49%; farms selling eggs dropped 37%, farms raising vegetables for sale decreased 35%, farms harvesting Irish potatoes dropped 52%; farms harvesting cotton were 41% fewer.

Farms of less than ten acres declined 50% during the five years, largely because of the definition change. Most of the decrease from 1954 in the number of farms occurred in farms having less than 220 acres.

Farms 10 to 69 acres in size decreased in numbers by almost three-fourths of a million during the five-year period. More than 70% of this decrease occurred in the 16 Southern states where there was a great deal of reorganization of individual farm operations due to the decline in the numbers of share tenants and croppers.

Only farms of 260 acres or more increased in number in the five-year interim. Specialization in the larger farming units progressed at a faster rate than in any five-year period in history.

The intervening years between 1954 and 1959 in Texas and throughout the nation saw changes occur that were in most instances continuation of past trends. But some of these trends were happening at a much accelerated pace, particularly the trend toward larger farms. The other most significant items are increased mechanization and greater per acre yields. Barring any severe economic disturbances such as a major recession, or governmental manipulation, it is likely that the 1964 Census of Agriculture will merely point up a continuation of past trends as farming and ranching becomes a more and more scientific and business-like operation.

BUSINESS GAMES WITHOUT COMPUTERS

BY RALPH L. DAY*

One of the most interesting and most promising new developments in modern management methodology is the business decision game. The business game is a method of representing the characteristics of a business situation in a set of rules which are designed to reflect the consequences of choosing among the many alternative courses of action facing the businessman. These rules are formulated as a mathematical structure, or "model." This model is so designed that when information representing business decisions is fed into it, the results approximate the actual outcome of similar business situations.

When the game model depicts a particular industry, an individual or a team can serve as the management of each firm. The hypothetical firms then compete in much the same way as actual firms in the real situation. The management of these "paper firms" has information about the resources available to the firm, knowledge of the legal and social framework in which the firm must operate, knowledge of competitive practices in the industry, and is supplied "current" information on general business situations. Each firm considers the information available to it and makes price, output, and operating decisions for a given time period such as a month or a quarter. The decisions of all firms are fed into the model, and the consequences of the simultaneous actions of the various firms are determined according to the set of rules embodied in the model. Solution of the model provides information for the preparation of income statements, balance sheets, share of the market reports, and other information useful to the decision-makers. Thus the decision-makers quickly see the consequences of their actions on the general position of their firm.

Participation in these games is believed to have beneficial results in broadening the experience of management personnel. It provides practice in the art of decision-making and allows specialists to become acquainted with the overall problems of the firm. For example, in participating in a top management game a financial specialist is required to deal with production and marketing problems and can see his role in the firm in better perspective. Participation in games which cover the operation of a hypothetical firm for the equivalent of several years points up the importance of long range planning to employees who tend to be preoccupied with the short-run aspects of their jobs. Games can be very useful in acquainting operating personnel with the use of new techniques such as order quantity formulas. Competence can be gained in the use of new techniques without using the actual firm's operations as the "guinea pig." Alternative managerial policies can be compared in the game model with similar benefits.

After several years of testing and development, business gaming is now well established as a useful tool for business management. Since the most widely publicized games have been those requiring solution on electronic computers, many businessmen associate the business game with the computer. Many are not aware that it is possible to devise business games for manual computation. The extent of computation involved in extremely complex games makes the computer necessary, but there is a wide range of application for noncomputer games.

Freedom From the Computer

Many useful games have been developed with computations simple enough to be done on a desk calculator or slide rule in a few minutes. The values of the model can be arranged in tables, and the computations can be reduced to the simple arithmetic of summing, multiplying, and dividing. Reasonably complex games can be computed in ten to twenty minutes per round. While the actual running time for a computer to do the same calculations might only be a minute or two, it would be difficult to get the information to the computer center, prepare the data for the machine, obtain and print out the results, and get them back to the participants in less elapsed time than it would take for on-the-spot manual computation. Since it is not necessary to have a computer nearby or to have communications with a computer installation, the noncomputer game can be played in a branch office or hotel room, increasing the opportunities for the use of business games as a training device.

The basic structure of the noncomputer game can be similar to that used in most computerized games except that the number of variable factors may not be made as large as is possible with computerized games. This does not mean that noncomputer games are watered-down versions of computerized games. Highly satisfactory noncomputer top-management games have been developed. For firms where computers are not available or where it is desirable to conduct games away from the computer installation, a noncomputer top management game can be very useful. However, the desire for the high degree of realism provided by a large number of interrelated variables favors the use of the computerized game whenever possible for top management games.

But whether or not a firm has a computer, noncomputer games can be extremely valuable tools when designed to reflect the key problems of particular aspects of the business. Thus it is possible for each operating department of a firm to have its own noncomputer game for use in training its personnel. For example, a production scheduling game might be very useful in training production control personnel or in making foremen aware of the problems of scheduling. Such games can be especially helpful in introducing new techniques. The game can be played without the use of the proposed technique. Then the game is replayed using the technique, and its results are graphically illustrated to the players. Such a demonstration is likely to be more effective in gaining acceptance for new methods than a dozen pep talks.

No attempt will be made here to explain in detail how a noncomputer game can be developed. Actually, it is not a difficult task for a person who is intimately acquainted with a business operation. Structuring a game is essentially a matter of recognizing the key relationships in the business situation and determining how they react to produce operating results. Once the important variable elements are recognized and the general way in which they affect

* Assistant Professor of Marketing Administration, The University of Texas.

each other is specified, it is not difficult to work out a table of values which will provide the basic structure of the game. For example, if a game is desired to illustrate the importance of careful assignment of salesmen to territories, the key variables could be identified as (1) the total business available in each territory, (2) the effectiveness of individual salesmen, and (3) the number of competitors' salesmen assigned to the territory. The first item is determined on the basis of the game builder's reasonable assumptions of the total business available and is partially revealed to the players along with information on business conditions. The second item, information on individual effectiveness, can be revealed in part to the players in advance, leaving them the problem of more specifically evaluating individual performance as the game progresses. Assignment of competitors' salesmen will be determined by competitors' decisions and is not known in advance by the players. The key problem facing the players is the selection and assignment of salesmen in such a way that the company's profits are maximized. Additional factors could be handled without affecting the basic structure by allowing them to modify the values of the basic variables. For example, incentive payments could be allowed to modify the performance index of a salesman or total advertising expenditures could be allowed to affect the total business available.

Scope of Noncomputer Games

The following are a few of the noncomputer business games which have been developed and tested in use:

(1) A salesman assignment game similar to the one outlined above.

(2) An inventory control game which centers around the problems of maintaining adequate inventory levels while holding down inventory carrying costs. This game is well suited to illustrate the benefits of using an economic order quantity formula.

(3) A supermarket management game (described below).

(4) A department store buyers game illustrating the problems of buying, pricing, and assignment of personnel.

(5) A production scheduling game centering around machine loading with machines having different rates of output for various products and varying operating costs.

(6) Various top management games covering the operations of firms which produce and sell goods, involving problems of financing, pricing, promotion, production (generally similar to some of the less complex computerized games).

A large national supermarket chain (which operates extensively in Texas) uses a "Supermarket Decision Simulation" game in its management training program. The players are organized into three teams. Each team serves as the management of a two-store chain of supermarkets. There are three areas and each team has a store in two areas so that Chain #1 will compete with Chain #2 in one area and Chain #3 in another area. At the beginning of the game, each chain has similar assets, a similar amount of cash on hand, and a forecast of the sales potential in each area. Each team must budget sales for each quarter for each store. Budgeted sales determines variable costs. Fixed costs are given. Goods must be ordered at the beginning of each period, and a spoilage allowance is charged against the goods unsold at the end of the period. Sales for a period cannot exceed stock on hand or ordered at the beginning of a period.

The available competitive weapons are advertising, special promotions, loss leaders, and store improvements. The advantages of store improvements are cancelled if a competitor makes the same improvement. Marketing research information is available at fixed fees. The teams consider all available information, establish policies, and make their decisions. At the end of each quarter, each team learns its sales for the quarter and can compute its own income statement. At the end of each year, an annual report gives the total sales, net profit position, and share of the market for each "chain." The firm which developed this game has used it with several groups of trainees and is pleased with the results. They believe that their noncomputer games gives valuable practice in decision-making and provides the trainees with a feel for operating in a competitive environment.

Business games have gained wide acceptance as training devices and noncomputer games are making this new method of training available to companies without computer equipment. Because of their flexibility and relative simplicity, special purpose noncomputer games are useful tools whether or not the firm has computer equipment.

It is predicted that in the near future larger numbers of alert businessmen will develop and use their own noncomputer games. Games will be used primarily as training devices, but as businessmen gain experience in forming and using business games, they will also find them useful as analytical aids in decision-making.

RETAIL SALES TRENDS BY KINDS OF BUSINESS

Source: Bureau of Business Research in cooperation with the Bureau of the Census, U. S. Department of Commerce

Kind of business	Number of reporting establishments	Percent change: Normal seasonal* Apr from Mar	Percent change: Actual Apr 1961 from Mar 1961	Percent change: Actual Apr 1961 from Apr 1960	Percent change: Actual Jan Apr 1961 from Jan-Apr 1960
DURABLE GOODS					
Automotive stores†	365	— 10	— 15	— 15	— 15
Furniture and household appliance stores†	173	— 1	— 4	— 10	— 11
Lumber, building material, and hardware stores	279	— 2	— 3	— 9	— 8
NONDURABLE GOODS					
Apparel stores	222	**	— 13	— 21	— 5
Drug stores	212	— 3	— 4	— 4	— 6
Eating and drinking places	80	— 2	— 3	— 4	— 3
Food stores	493	— 3	— 3	— 3	— 1
Gasoline and service stations	139	— 3	— 3	— 7	+ 1
General merchandise stores†	175	— 4	— 12	— 19	— 5
Other retail stores†	252	— 1	— 9	— 6	— 3

* Average seasonal change from preceding month to current month.

** Change is less than one-half of one percent.

† Includes kinds of business other than classification listed.

HOME FINANCING: 1961 POLICIES AND PROGRAMS

BY CHARLES O. BETTINGER

If the homebuilding recession is the product of tight money and high interest rates, the current administration is on the path to a quick cure-all. Recent federal actions and proposals in the legislative mill promise to pump billions of government funds into the growing surplus of money available for home mortgages and other noncommercial construction projects. However, rather than picture the current proposals as a complete solution to the problem of the home-building recession, the administration is attacking the situation with the time-worn economic theory of reducing interest rates and increasing the money supply in an attempt to reach new home buyers who are currently priced out of the new home market.

Until Congress could act on the new administration's plans, President Kennedy moved to ease the tight money policy of the past year by lowering the interest rate ceiling on home mortgages insured by the Federal Housing Administration to 5½% from 5¾%. On May 26, the interest ceiling on FHA loans was lowered once more by ¼% to the current maximum of 5¼%.

In addition to this action, the Federal Home Loan Bank Board moved to increase the funds available for home mortgages in all federal savings and loan institutions. As the governing agent of savings and loan institutions, the Board enlarged the borrowing privileges of these institutions from the 11 regional Federal Home Loan Banks to 15% of their share accounts from the previous 12½%. These loans were to be used for meeting seasonal needs or to provide for mortgage expansion. In addition, the Board authorized intermediate-term borrowing up to five years, and investments in speculative housing developments of up to 5% of their share accounts.

Down payments were lowered by the Board also on mortgage loans by savings and loan associations on homes in the $18,000 to $20,000 classification, allowing up to a 90% loan on the market value of the homes under $20,000 whereas the previous limit was $18,000.

Legislative action pending in Congress centers more around a pump-priming solution to the recession as the Senate considers a bill releasing $5 billion in funds for immediate use and approximately twice that much in the long-range stage. The federal housing program may receive $1.5 billion, doubling the current allotment of $750 million. The additional money will be used to purchase mortgages in the secondary market, with special emphasis on government-backed, low-interest mortgages which are unpopular to private investors. A prime example of this type of loan would be the mortgage to a nonprofit corporation that would build low-rent housing for the lower incomes, or for the elderly. Other grants in the Senate version of the bill include: $2.5 billion to finance additional urban renewal grants ($2 billion already released); $1.35 billion for college housing; and other grants for the construction of public facilities, housing for the elderly, urban recreation area, and low-rent public housing units.

New features which are being proposed in the housing bill in Congress are: (1) FHA insurance for homes costing under $13,500 (actually $9,000 to $15,000, depending on the area) requiring no down payment and payout period ranging to 40 years; (2) a new home improvement loan program which would grant loans as high as $10,000 for 25 years (the current upper limits on this program are $3,000 and 5 years); (3) FHA insurance on loans to nonprofit organizations for building rental units for persons not eligible for public housing, and who cannot afford conventional housing; (4) defaulted, FHA-insured mortgages to be paid in cash rather than debentures; (5) finally, the FHA Commissioner would be given the authority to reduce by one-half the current insurance charge on government-backed mortgages.

Builder, Buyer, and a Billion Dollars

A billion dollars is a lot of money, but how is this going to help the contractor or the home buyer? Some of the policies are so far-reaching that the final results may never be clearly defined. Others which have been proposed or enacted are hotly debated as to the end result. The fact that the federal government is pledged to improving the homebuilding industry as a means of ending the general slowdown in economic activity is clear. Some of the proposals which would make funds available for specific construction projects such as college housing, homes for the elderly, and urban renewal will directly affect builders in those segments of the industry. Differences of opinion have occurred mostly in reference to the home buyer, interest rates, the terms of home mortgages and down-payment requirements.

One illustration of this controversy is the proposal for FHA insurance on no-down-payment, 40-year home mortgages. Proponents of this plan say that this would immediately place a large segment of the population in a position where they could buy a home instead of renting one. Since the homes which would be affected fall under the $13,500 price range, the lower-income groups would benefit most. The critics claim that the equity in a 40-year loan would grow too slowly so that a long recession could result in abandonment of their new homes by many debtors. The high cost of financing a longer loan was cited as the basis of the disfavor of one Philadelphia banker. His data on the cost of a $13,500 home with a 40-year loan show a total cost, including interest, of $33,422 when paid out on the regular schedule. A 30-year loan on the same house would reduce the total cost of the home to $27,598, a difference of $5,824 (almost ½ the original cost of the house). Countering this opposition is the argument that since most 30-year mortgages are paid off before maturity (on the average of 11 years) the same would be true as in the case of 40-year loans, thereby reducing the overall cost of financing. Another danger which is cited is the possible building and financing of so many homes in one year that the demand for homes and mortgages in the future would be lessened. Since the same discussion was presented when 30-year loans were introduced, it is likely that the term will be extended regardless of this opposition.

A brief example was given by the National Homes Corporation showing the type of monthly reduction that the home buyer could expect by buying a home with a 40-year mortgage as opposed to a 30-year mortgage. A $10,000, 40-year loan would have monthly payments of $51.58, down $5.20 from $56.78—the monthly payment of a 30-year note with the same interest rate. The effect of this provision would enable one to buy a home with no down payment and a monthly income about $25 less than the current

minimum (based on the typical ratio of income to payments of 5 to 1).

Interest, Discounts, and Homebuying

What is the result of President Kennedy's lowering of the formal interest rate ceiling on FHA-insured mortgages to the average home buyer? The reduction in rates to 5¼% from 5¾% will not immediately give the prospective purchaser of a home much change in the cost of his loan. The reason for this apparent discrepancy is found in the fact that lenders handling home mortgages will not lend at that low rate. Therefore, a discount on the mortgage is made in the secondary market to give the lender the effective interest rate that is current. Since the builder must absorb this cost, he simply boosts the cost of the house by that amount and the buyer gains nothing or very little. Therefore, more emphasis should be given to the going discount on the mortgages than on the formal interest ceiling.

The major reason for the drop in the interest ceiling was to give the effective rate more room to drop since the 5¾% mortgages were selling at par. The 5½% liens would require a 2% discount to yield the same effective rate as the 5¾% liens at par. However, the Federal National Mortgage Association, the government agency which purchases home mortgages which are unattractive to private lenders, posted the discount rate at only 1½%, thereby reducing minutely some of the interest costs in home financing. The effective annual yield on home loans, which is the homebuyers annual interest cost, slipped only about .05% on most FHA-insured loans to illustrate the minor drop in financing cost that occurred almost simultaneously with the drop in the formal interest charge. Now, however, the discount rate can be reduced as it has in the past months as the money supply grows and the prices for home mortgages weaken. Further reductions in the discount would benefit the buyer in the form of less expensive financing.

The Kennedy announcement lowering interest rates on FHA-insured homes also will indirectly have a downward pull on the interest rates on conventional loans which have been slipping consistently since early 1960. Home buyers using the conventional loan method for purchasing a house naturally benefit any time that the conventional rates drop. To show the exact difference, a California savings and loan association table of monthly payments gives the difference between a 6% rate and a 6.6% rate on a $10,000 loan as $64.43 and $68.15, respectively. When using the 5 to 1 multiplier effect of this decrease, a great number of people become eligible for a loan that were previously disqualified.

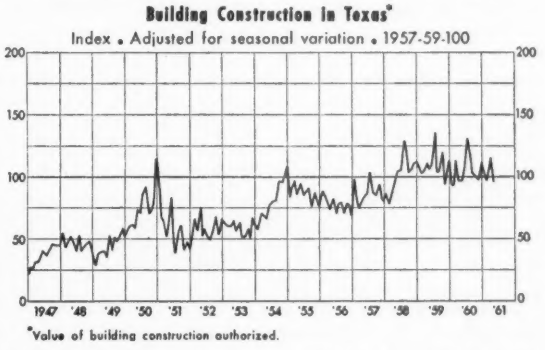
Savings are Soaring

To add to the downward influence on interest charges, savings institutions report a heavy influx of funds into their accounts. Finding themselves in a profit squeeze between falling interest rates and excess funds of depositors which receive relatively high dividends, most officers of these institutions feel that a dividend cut is near and necessary. This widespread notion presupposes a continued drop in interest rates.

As savings show strong gains, the home mortgage demand is showing some pickup. Savings and loan associations, which account for approximately 40% of all home loans, report a 10% gain in home mortgage holdings in the first two months of 1961 when compared to the same 1960 period. Mutual savings banks had appreciable increases in these holdings while life insurance companies remained virtually unchanged.

Closing Costs

Recently, *American Home Magazine* published a critical review of closing costs involved in the purchase of a home. Overdue, it states, is a revision in methods and costs which would help the prospective purchaser of a new home afford his buy. Currently closing costs which consist of charges for title search and insurance, mortgage service charges and transfer of ownership charges range in total from $250 to $1,000. Since all of these charges are immediate and in cash, many buyers are forced to abandon buying plans indefinitely. These costs when combined with any down payment total to a sizable sum for the buyer to meet. The solution given to the home buyer was to insist on an itemized list of all charges included in the closing costs.


Building Construction in Texas*
Index • Adjusted for seasonal variation • 1957-59-100
200
150
100
50
0
'47 '48 '49 '50 '51 '52 '53 '54 '55 '56 '57 '58 '59 '60 '61
*Value of building construction authorized.

Another solution might be to include these costs in the mortgage loan and spread the payment out over the life of the loan without requiring so much immediate cash.

A Workable Solution to Home Financing

The National Association of Homebuilders has proposed a very practical solution to the problem of home financing which would overcome the problems of 40-year financing and yet maintain most of the benefits. They proposed a 30-year mortgage loan for the payoff period, but included three different rates of payback in this 30-year period. Since the first five years are the most critical years for a young, low-income, home buyer because of the additional costs of furniture, appliances, and landscaping, these years should have a payoff rate equal to that of 40- to 45-year amortization. The next five years, when some of the income burdens have eased, should have the amortization rate of a 30-year loan, and finally, the balance of the loan payments should be rated on a 20-year schedule. This plan could have the same no-down-payment provision as the current federal proposals enabling many of the younger groups to purchase a home now and yet still reduce the overall financing cost of the mortgage. Perhaps it is time that the federal authorities should examine this solution from the point of view of the people that are most affected by the building downswing. This plan undoubtedly has some merits directly in line with the goals of the administration. Also, with the lower payments in the first five years of the mortgage, it is quite possible that the number of foreclosures on homes might be lessened instead of increased, thereby reducing some of the cost of the federal home insurance program.

GOLD AND BALANCE OF PAYMENTS DEFICITS

BY JAMES R. KAY*

Much has been written of late concerning the unsatisfactory status of the United States' balance of international payments. Of most concern has been the attendant loss of gold. It is the purpose of this brief article to attempt a clarification of the role gold has played in our monetary system and the useful role it can play in the present period of adjustment to a better balance in our international financial position.

The Functions of Gold

This country's central banking organization, the Federal Reserve System, was superimposed on the gold standard monetary mechanism which was adopted in 1900. Since its inception in 1914, the Federal Reserve System has operated within the framework of some variant of the gold standard. In that context, gold has performed two important functions. First, it has served as "legal cover." The size of the nation's gold stock has been employed to set a legal maximum to the amount of money of all types which may circulate. Under present law, the Federal Reserve banks must maintain a holding of gold certificate reserve amounting to at least 25% of their liabilities for their outstanding notes and the deposits they hold. In turn, gold certificates are backed by a 100% reserve of actual gold held by the United States Treasury. Thus, Federal Reserve liabilities for notes outstanding and deposits held may not exceed four times the amount of their gold certificate holdings. The liabilities of the Federal Reserve banks become a supply of reserve-type funds for the nation's commercial banks. In the form of vault cash and deposit claims against Federal Reserve banks, the commercial banks are placed in possession of legal reserves which serve as a base for the deposit money (demand deposits) which they create in their lending and investing operations. On the basis of the average legal reserve percentage for all commercial banks, the deposit money maximum is approximately six times their legal reserve funds.

Second, gold serves as a means of international payment. It is accepted all over the world in payment for goods and services and in settlements of debts. It is widely desired as a reserve of international purchasing power, to tide the nation over during a period of deficits in its balance of payments. Closely related to this function, in a gold standard arrangement such as the International Monetary Fund, is the assurance of a high degree of stability in the rates at which the United States dollar may be exchanged for foreign moneys. This is achieved by the legal prescription of national monetary units as equivalent to a precise quantity of gold. Thus, the International Monetary Fund Agreement requires that "the par value of the currency of each member shall be expressed in terms of gold as a common denominator or in terms of the U.S. dollar of the weight and fineness in effect July 1, 1944." The dollar, therefore, has an official equivalence to the money of all other members, except a few that have not yet set a gold or dollar parity. Either by direct conversion into gold or in the foreign exchange market, a predictable amount of foreign money can be obtained for that of a member country. This greatly facilitates international trade and investment, which inevitably involve forward commitments by traders and investors.

* Professor of Finance, The University of Texas

Gold Standard "Rules"

At the time the United States adopted the gold standard, gold flows were viewed as having a most important economic function to perform. Such flows were taken as evidence of an imbalance of the domestic economy with the world economy and as an automatic correction of the imbalance. Gold flowed because the domestic economy was out of step with the world economy, in prices of goods and services or in interest rates or both.

When gold flowed out, it was because the nation's exports of goods and services fell below its imports of similar items (domestic prices too high relative to those prevailing in certain other countries) or because purchases of capital investments abroad were in excess of capital imports (domestic interest rates too low relative to investment yields obtainable abroad). In most instances, both adverse relationships would constitute the over-all maladjustment.

Central banking policy, adding leverage to the automatic correctives of the gold flow, was expected to redress the imbalance in a relatively short period of time. Gold standard theory had evolved a code of "rules of the game." These "rules" obliged a central bank to permit an outflow of gold to exert a deflationary influence upon the domestic economy and to exert its own influence in the same direction. That is to say, a loss of gold was expected to deplete the cash reserves of the commercial banks, forcing them into a contraction of their lending and investing operations. The central bank, reflecting the depletion of its own gold reserve, was expected to raise its discount rate, thereby intensifying the pressure on the commercial banks to contract their outstanding credit. Rather quickly domestic prices were expected to fall into line with world prices. The credit stringency was expected to force up domestic interest rates to a level where capital seeking yield would begin to flow in. Thus, exports of goods and services would rise relative to imports and capital would flow in on net balance. The gold outflow would be eliminated, perhaps supplanted by an inflow.

Gold inflows, under the "rules" placed the central bank under similar obligation to see to it that the increasing gold stock was translated with full impact into expanding credit, rising prices, and falling interest rates.

A study of the interwar currency experience by Ragnar Nurkse revealed that the "rules" were an idealized, but inaccurate account of actual reactions of central banks to gold flows. A more recent study by Arthur I. Bloomfield, covering the earlier period, 1880–1914, reached the same general conclusion. Throughout the history of gold standards central banks have been much inclined toward neutralizing the impact of gold flows, rather than letting them adjust money supplies automatically.

Gold and Federal Reserve Policy

A review of the history of the Federal Reserve System reveals that gold has rarely been a limiting or guiding influence upon its credit policies. As early as 1923, the Federal Reserve Board formally disavowed the "rules of the game." In its *Annual Report* of that year it took note of the large gold inflow. The United States was the only major country on a gold standard. Our large export surplus was

a major explanation of the gold inflow; however, chaotic currency conditions abroad and serious inflation in a number of countries also brought capital into this country seeking safety. The Board pointed out that the gold movements "in part have occasioned and in part have resulted from the breakdown of the gold standard." Anticipating the eventual re-establishment of the gold standard in Europe and the repatriation of foreign capital invested in this country, the Board stated further that: "It is the part of prudence for the United States and for the Federal Reserve banks . . . to pursue a course of action which will enable them to part with such portion of this gold as Europe will need . . ." Outflow of gold was not restraining credit expansion abroad, according to the "rules." Expansion according to the "rules" in the United States would have caused an intolerable inflation in this country. Throughout the 1920's, the usual policy of the Federal Reserve with respect to gold flows was to neutralize their influence on credit conditions.

In the 1930's gold flowed into the United States in such a vast amount as to render the Federal Reserve impotent. It would have preferred to neutralize the flow, to a large extent at least, but the task became impossible. The gold certificate reserves of the System rose to over 90%.

On one occasion, except for the present one, gold tended to become an unwanted restraint upon credit expansion. In 1945, it appeared that wartime credit requirements would force Federal Reserve liabilities to be created up to the maximum permitted by the then 40% and 35% (behind notes and deposits, respectively) gold certificate and lawful money reserves. The Congress met the problem by simply reducing the reserve requirement of the Federal Reserve Banks to 25%. This is noteworthy, for the experience indicates that confidence in the value of money need not be lost merely because the "legal cover" of the central bank is reduced.

Current Problems Related to Gold

In recent years, especially since 1958, the United States has run a substantial deficit in its balance of international payments. Our payments to foreigners for imports, investments, and for economic and military aid have exceeded our receipts from them for our exports of goods and services. In settlement we have transferred gold and dollar assets to foreigners in considerable amounts. The transfers of gold amounted to $2.2 billion in 1958, $1.1 billion in 1959, and $1.7 billion in 1960—a total of $5 billion or 22% of our gold stock in a three-year period. The gold loss would have been even larger had not foreigners accepted short-term dollar claims in settlement of a substantial part of the deficits.

Foreign short-term dollar claims on the United States have built up rapidly in the post-World War II period. This trend has been noted mostly with satisfaction. Does it not demonstrate confidence in the stability of the dollar? However, the claims are short-term and therefore subject to rapid liquidation and transfer of the proceeds to other financial markets. In other words, they represent the potentiality of a further large drain of gold from the country.

Short-term Liabilities to Foreigners

Table 1 shows the net debtor position, short-term, of the United States to the rest of the world. At the last date shown, February 1961, foreign-owned short-term assets in the United States amounted to $20.8 billion. United States citizens, businesses, and institutions owned only $3.7 billion of short-term claims against other countries. Therefore, the United States was a net debtor on short-term account in the amount of $17.2 billion. The $20.8 billion of short-term liabilities included bank balances, United States Government securities running no more than one year from date of issue, and a relatively small amount of bankers acceptances, commercial paper, and other credit instruments.

Gold may be withdrawn from the United States by foreign governments and central banks. Furthermore, to the extent that private holders of dollar claims elect to liquidate their dollar assets and convert the proceeds into other moneys a depletion of the foreign balances of United States foreign exchange dealers is experienced. In order to maintain their working balances and protect the dollar from depreciation, gold would be exported for purchasing additional supplies of the moneys in short supply. The United States Treasury would release gold for this purpose in accord with its commitment, as a member of the International Monetary Fund, to maintain the exchange value of the dollar within 1% of its gold parity.

TABLE 1

Net Short-term Liabilities of the United States
(in millions of dollars)

End of year or month	Short-term claims on foreigners	Short-term liabilities to foreigners	Net short-term indebtedness	U. S. gold stock less "legal cover" for Federal Reserve liabilities
1956	1,946	14,939	12,993	10,018
1957	2,199	15,158	12,959	10,868
1958	2,542	16,159	13,617	8,684
1959	2,623	19,387	16,764	7,461
1960	3,590	21,368	17,778	6,071
1961, Feb.	3,655	20,835	17,180	6,287

Source: *Federal Reserve Bulletins*

How Adequate Is Our Gold Stock?

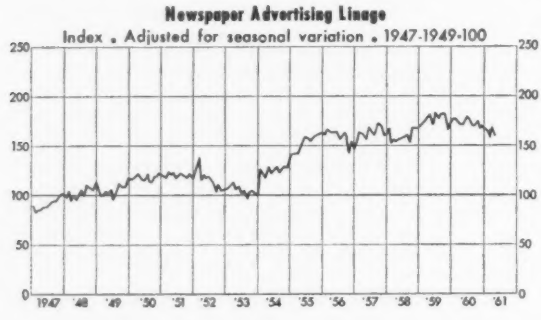
At the end of February 1961, the United States gold stock stood at $17.4 billion. Of this amount, $11.1 billion was needed, under present law, as legal cover (25%) for the liabilities of the Federal Reserve banks, consisting of $27.0 billion of outstanding notes and $17.4 billion of deposits held. Thus, $6.3 billion was available for export should that be necessary.

Historically, $6.3 billion of exportable gold would be viewed as a very adequate reserve of international money. Yet, as shown in Table 1, it is far less than the potential drain measured by short-term liabilities to foreigners, which amounted to $20.8 billion. It is important, then, to consider how much of the short-term liabilities to foreigners are likely to be liquidated.

The willingness of foreigners to continue to hold short-term dollar assets will be influenced by two general considerations: (1) the interest yields obtainable from investments in dollar assets as compared to those available elsewhere, and (2) the outlook as to the relative stability of the purchasing power and exchange stability of the dollar.

To what extent are foreign holders of dollar assets likely to shift their funds to other countries in order to capture

higher interest yields? The Philadelphia Federal Reserve Bank provided the answer in its April 1960 *Business Review*. Following its analysis, the following conclusions may be posed: (1) the $3.8 billion belonging to international institutions is not owned for investment yield, and does not move in search of higher interest rates, (2) the $10.2 billion belonging to foreign governments and official institutions is not likely to move in any large amount in response to interest rate changes, except to be shifted from one type of dollar asset to another, (3) the remaining $6.8 billion is owned primarily as working balances of foreign private businesses and financial institutions and is not sensitive to interest rate differentials.



The greatly increased stature of the United States as an international financial center in the post-World War II years accounts for the large holdings of short-term dollar assets abroad. The dollar has taken on the role as *the* international money, being as it is readily convertible into gold or any other money. In the International Monetary Fund Agreement, member countries designate the parity of their moneys in terms of gold *or* United States dollars. Only a small amount of foreign-held dollar assets should be viewed as normally movable in search of interest yield.

The second consideration, namely, the outlook for stability of the purchasing power and exchange value of the dollar gives us greater pause. The baldest form of the question here is: "Will the dollar be devalued?" Ultimately, the answer will depend upon our success in relieving the deficits in our balance of payments. Resolute statements of the new Kennedy administration to avoid devaluation have helped greatly to stem the recent outflow of gold. Its success in obtaining a better sharing of international aid burdens and improving the receptivity of United States goods abroad hold the answers to our balance of payments problems. Should the deficits prove intractable, a point will be reached where there will be widespread conviction of the inevitability of a devaluation. In such an eventuality, which the writer does not view as likely, gold would flow out in large volume. Foreign private owners of dollar assets could not be expected to sit idly by and accept capital losses on them, even though they are normally used as working balances.

The Usefulness of Our Gold Stock

Our ability to continue to export gold is important in buying time to correct the imbalance in our international payments position. Drastic deflationary measures are most harmful and, fortunately, not necessary so long as gold may be freely exported to the rest of the world according to its choice as to how our deficits are to be settled.

It has been suggested that our gold stock be mobilized fully in defense of the exchange value of the dollar. That is to say, that gold be relieved of its traditional function as legal cover for Federal Reserve liabilities and be considered as entirely available as a reserve of international money. This suggestion has merit and is worthy of the most serious consideration by the Congress.

A first consideration would seem to be our experience with a reduction of the gold certificate reserves requirements of the Federal Reserve banks in June 1945. The cut in the reserve requirements was from 40% against notes outstanding and 35% against deposits held to 25% against both types of liabilities. No crisis of confidence in the purchasing power of the dollar ensued, although the special necessities of wartime finance were certainly on the side of calm reception of the change.

The experience of other major countries in relieving gold of the domestic cover function is informative. Not in many years has any other major country required its central bank to maintain a minimum reserve of gold behind its currency issues or other liabilities. The Bank of England is not required to maintain a gold reserve against its deposits. Its Issue Department is required to back with gold only its notes outstanding above the amount of the fiduciary issue. The latter issue has constituted virtually the entire issue since September 1939. The gold held by the Bank of England today is only a token percentage of its liabilities. Nearly all the British gold stock is held by the Exchange Equalization Account, which, as its name implies, employs it in defense of the exchange value of the pound. In April 1940, the 25% gold reserve requirement behind Bank of Canada note issues and deposits held was suspended and has not been reimposed. Thus, the Bank of Canada has held no gold reserves in over two decades, yet the exchange value of the Canadian dollar has been maintained. On most occasions in recent years, it has been at a premium in relation to the United States dollar.

Summary

There appears to be no immediate threat to our existing gold stock. It should prove to be fully adequate to perform the two important tasks assigned to it, the legal cover function and the international reserve of purchasing power function—if good progress can be made in eliminating our balance of payments deficits. Yet, that problem is of such magnitude as to suggest the wisdom of legislative action to further "stretch" the gold stock in the performance of its role as a settler of deficits. By further reducing the legal cover function, as has been done before in this country and to an even greater extent in other major countries, the United States can gain more time to achieve satisfactory international balance. There seems to be no reason why a 10% gold certificate reserve requirement for Federal Reserve banks would not work as well as a 25% requirement. The same determination to work for stability of the dollar, internally and externally, can be assumed under either reserve percentage and even under a zero percentage requirement.

The time for legislative action is during periods of relative calm, when gold outflow is at a minimum as at the present. If taken in a period of heavy outflow, conveying the impression abroad of a last-ditch effort to avoid devaluation, it very likely would only intensify the outflow.

Local Business Conditions

As a reader's guide to better utility of retail sales data, an average per cent change from the preceding month has been computed for each month of the year. This percent change is marked with a dagger (†) following that figure. The next percent change represents the actual change from the preceding month. A large variation in the normal seasonal from the actual figure represents an abnormal month. This third percent change is the percent change for the identical period the preceding year showing the change between the two years. Postal receipt information which is marked by an asterisk (*) indicates cash receipts received during the four-week postal accounting period ending April 28, 1961, and the percent changes from the preceding period and the comparable period in the previous year. Annual postal data are for 13 four-week periods falling closest within 1959 and 1960 calendar years. Changes less than one-half of one percent are marked with a double asterisk (**). Houston and Waco retail sales information are reported in cooperation with the University of Houston Center for Research in Business and Economics and Baylor Bureau of Business Research, respectively. End-of-month deposits as reported represent money on deposit in individual demand deposit accounts on the last day of the month. All population figures are final 1960 census data. Figures under Texarkana with the following symbol (§) are for Texarkana, Texas, only.

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
ABILENE (pop. 90,368)			
Retail sales	— 2†	— 19	— 14
Apparel stores	**†	— 19	— 30
Automotive stores	— 10†	— 30	— 13
General merchandise stores	— 4†	— 16	— 18
Lumber, building material, and hardware stores	— 2†	— 10	— 4
Postal receipts*	$ 95,275	— 7	— 3
Building permits, less federal contracts	$ 1,504,004	+ 24	— 26
Bank debits (thousands)	$ 96,391	— 8	+ 5
End-of-month deposits (thousands)‡	$ 66,712	— 3	+ 13
Annual rate of deposit turnover	17.0	— 9	— 8
Employment (area)	35,450	**	+ 10
Manufacturing employment (area)	3,590	— 2	+ 14
Percent unemployed (area)	6.3	**	+ 9
ALICE (pop. 20,861)			
Retail sales			
Lumber, building material, and hardware stores	— 2†	+ 1	+ 12
Postal receipts*	$ 15,003	+ 21	**
Building permits, less federal contracts	$ 120,630	— 7	+ 11
ALPINE (pop. 4,740)			
Postal receipts*	$ 3,834	— 22	+ 17
Building permits, less federal contracts	$ 24,300	+103	— 42
Bank debits (thousands)	$ 2,323	— 17	— 8
End-of-month deposits (thousands)‡	$ 3,570	+ 3	+ 7
Annual rate of deposit turnover	7.9	— 17	— 11
AMARILLO (pop. 137,969)			
Retail sales	— 2†	— 6	— 21
Apparel stores	**†	**	— 32
Automotive stores	— 10†	— 2	— 4
Drug stores	— 3†	— 18	— 23
Eating and drinking places	— 2†	+ 1	— 14
Furniture and household appliance stores	— 1†	— 9	— 29
Postal receipts*	$ 187,989	+ 3	— 7
Building permits, less federal contracts	$ 2,932,825	+ 1	+ 2
Bank debits (thousands)	$ 202,520	— 11	— 6
End-of-month deposits (thousands)‡	$ 113,255	— 3	**
Annual rate of deposit turnover	21.1	— 10	— 8
Employment (area)	51,300	**	— 3
Manufacturing employment (area)	5,470	**	— 8
Percent unemployed (area)	4.7	— 15	+ 21

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
ANDREWS (pop. 11,135)			
Postal receipts*	$ 6,121	— 38	**
Building permits, less federal contracts	$ 105,600	— 28	— 60
Bank debits (thousands)	$ 5,958	— 5	.....
End-of-month deposits (thousands)‡	$ 7,811	— 4	.....
Annual rate of deposit turnover	8.9	— 1	.....
ARANSAS PASS (pop. 6,956)			
Building permits, less federal contracts	$ 84,200	+ 28	+ 94
Bank debits (thousands)	$ 4,029	+ 1	+ 3
End-of-month deposits (thousands)‡	$ 4,107	— 1	+ 8
Annual rate of deposit turnover	11.7	+ 4	— 3
ARLINGTON (pop. 44,775)			
Retail sales			
Lumber, building material, and hardware stores	— 2†	+ 13	+ 47
Postal receipts*	$ 37,634	— 8	+ 11
Building permits, less federal contracts	$ 923,386	+ 27	+137
Bank debits (thousands)	$ 29,041	— 5	.....
End-of-month deposits (thousands)‡	$ 20,895	— 2	.....
Annual rate of deposit turnover	16.5	— 6	.....
Employment (area)	211,500	+ 1	+ 1
Manufacturing employment (area)	53,550	**	— 1
Percent unemployed (area)	5.3	— 9	+ 23
AUSTIN (pop. 186,545)			
Retail sales	— 2†	— 9	— 13
Apparel stores	**†	— 14	— 28
Automotive stores	— 10†	+ 2	+ 2
Drug stores	— 3†	— 2	— 4
Food stores	— 3†	+ 2	**
Furniture and household appliance stores	— 1†	— 22	— 22
General merchandise stores	— 4†	— 17	— 23
Lumber, building material, and hardware stores	— 2†	— 23	— 26
Postal receipts*	$ 379,949	**	+ 5
Building permits, less federal contracts	$ 6,491,686	+ 37	+ 37
Bank debits (thousands)	$ 209,892	— 11	— 9
End-of-month deposits (thousands)‡	$ 158,898	**	+ 8
Annual rate of deposit turnover	15.8	— 14	— 18
Employment (area)	78,200	**	+ 4
Manufacturing employment (area)	5,780	+ 1	— 5
Percent unemployed (area)	4.1	— 7	+ 11

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
BAY CITY (pop. 11,656)			
Retail sales			
Automotive stores	— 10†	— 19	— 9
Drug stores	— 3†	— 1	— 1
Postal receipts*	$ 11,452	+ 13	— 1
BAYTOWN (pop. 28,159)			
Postal receipts*	$ 21,364	— 12	— 3
Building permits, less federal contracts	$ 650,744	+ 32	+149
Bank debits (thousands)	$ 20,263	— 11	— 3
End-of-month deposits (thousands)‡	$ 23,599	— 5	+ 4
Annual rate of deposit turnover	10.0	— 10	— 8
Employment (area)	512,800	**	+ 3
Manufacturing employment (area)	93,250	**	— 2
Percent unemployed (area)	4.7	— 2	+ 12
BEAUMONT (pop. 119,175)			
Retail sales	— 2†	— 15	— 18
Apparel stores	**†	— 18	— 25
Automotive stores	— 10†	— 19	— 23
Furniture and household appliance stores	— 1†	— 19	— 10
Lumber, building material, and hardware stores	— 2†	— 6	+ 7
Postal receipts*	$ 115,699	+ 3	+ 2
Building permits, less federal contracts	$ 1,125,542	— 28	— 15
Bank debits (thousands)	$ 153,903	— 12	— 3
End-of-month deposits (thousands)‡	$ 99,345	— 1	**
Annual rate of deposit turnover	18.5	— 10	— 5
Employment (area)	107,300	+ 1	+ 2
Manufacturing employment (area)	33,920	+ 1	+ 1
Percent unemployed (area)	8.0	+ 5	+ 13
BEEVILLE (pop. 13,811)			
Retail sales			
Lumber, building material, and hardware stores	— 2†	+ 23	+ 14
Postal receipts*	$ 11,399	+ 5	+ 14
Building permits, less federal contracts	$ 148,980	+ 6	— 80
Bank debits (thousands)	$ 9,309	— 5	— 5
End-of-month deposits (thousands)‡	$ 12,603	— 3	— 6
Annual rate of deposit turnover	8.7	— 2	**
BELLAIRE (pop. 19,872)			
Postal receipts*	$ 31,234	+ 6	.....
Building permits, less federal contracts	$ 61,031	— 18	— 87
Bank debits (thousands)	$ 12,574	— 6	.....
End-of-month deposits (thousands)‡	$ 8,387	**	.....
Annual rate of deposit turnover	18.0	— 5	.....
Employment (area)	512,800	**	+ 3
Manufacturing employment (area)	93,250	**	— 2
Percent unemployed (area)	4.7	— 2	+ 12
BIG SPRING (pop. 31,230)			
Retail sales	— 2†	— 4	— 17
Automotive stores	— 10†	— 5	— 17
Drug stores	— 3†	— 9	— 11
Lumber, building material, and hardware stores	— 2†	+ 10	— 7
Postal receipts*	$ 25,512	+ 11	+ 14
Building permits, less federal contracts	$ 617,557	— 7	+ 23
Bank debits (thousands)	$ 35,472	— 12	— 4
End-of-month deposits (thousands)‡	$ 27,745	+ 2	+ 8
Annual rate of deposit turnover	15.5	— 9	— 7
BRADY (pop. 5,338)			
Postal receipts*	$ 4,102	**	— 2
Building permits, less federal contracts	$ 31,950	— 24	+ 39
Bank debits (thousands)	$ 5,014	+ 13	— 5
End-of-month deposits (thousands)‡	$ 6,747	+ 1	+ 4
Annual rate of deposit turnover	9.0	+ 11	— 7
BISHOP (pop. 3,722)			
Building permits, less federal contracts	$	—100	—100
Bank debits (thousands)	$ 2,198	— 2	— 10
End-of-month deposits (thousands)‡	$ 2,281	— 4	+ 6
Annual rate of deposit turnover	11.3	+ 2	— 13
BRENHAM (pop. 7,740)			
Postal receipts*	$ 8,274	+ 20	+ 25
Building permits, less federal contracts	$ 50,013	— 18	+ 42
Bank debits (thousands)	$ 9,554	+ 13	+ 17
End-of-month deposits (thousands)‡	$ 11,877	— 5	— 5
Annual rate of deposit turnover	9.4	+ 15	+ 21
BROWNSVILLE (pop. 48,040)			
Retail sales	— 2†	+ 2	+ 4
Automotive stores	— 10†	+ 3	+ 11
Lumber, building material, and hardware stores	— 2†	+ 19	+ 2
Postal receipts*	$ 28,122	— 17	— 7
Building permits, less federal contracts	$ 234,827	— 17	+ 43
Bank debits (thousands)	$ 30,307	+ 4	+ 21
End-of-month deposits (thousands)‡	$ 17,663	— 17	+ 1
Annual rate of deposit turnover	18.7	+ 16	+ 11
BROWNWOOD (pop. 16,974)			
Retail sales			
Apparel stores	**†	— 26	— 24
Postal receipts*	$ 23,219	— 3	— 3
Building permits, less federal contracts	$ 63,250	— 22	— 87
Bank debits (thousands)	$ 13,841	— 16	**
End-of-month deposits (thousands)‡	$ 13,031	— 1	+ 5
Annual rate of deposit turnover	12.7	— 16	— 5
BRYAN (pop. 27,542)			
Retail sales	— 2†	— 10	— 8
Apparel stores	**†	— 15	— 19
Automotive stores	— 10†	— 18	— 20
Food stores	— 3†	— 2	+ 3
Lumber, building material, and hardware stores	— 2†	— 9	— 15
Postal receipts*	$ 21,182	+ 5	— 3
Bank debits (thousands)	$ 21,106	— 6	.....
End-of-month deposits (thousands)‡	$ 15,750	+ 2	.....
Annual rate of deposit turnover	16.2	— 6	.....
CALDWELL (pop. 2,204)			
Postal receipts*	$ 2,239	— 9	+ 8
Bank debits (thousands)	$ 1,873	— 8	— 9
End-of-month deposits (thousands)‡	$ 3,842	**	+ 4
Annual rate of deposit turnover	5.9	— 4	— 11
CAMERON (pop. 5,640)			
Postal receipts*	$ 6,871	+ 6	— 5
Building permits, less federal contracts	$ 5,200	+ 44	— 68
Bank debits (thousands)	$ 4,285	+ 6	— 9
End-of-month deposits (thousands)‡	$ 4,394	+ 1	— 2
Annual rate of deposit turnover	11.7	+ 4	— 12
CISCO (pop. 4,499)			
Postal receipts*	$ 4,080	— 12	**
Bank deposits (thousands)	$ 2,991	— 14	— 8
End-of-month deposits (thousands)‡	$ 3,738	— 2	— 5
Annual rate of deposit turnover	9.5	— 10	— 3
CLUTE CITY (pop. 4,501)			
Postal receipts*	$ 1,853	— 12	+ 18
Building permits, less federal contracts	$ 27,025	— 60	— 86
Bank debits (thousands)	$ 1,468	— 3	— 1
End-of-month deposits (thousands)‡	$ 1,249	— 2	+ 13
Annual rate of deposit turnover	13.9	— 3	— 9

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
CLEBURNE (pop. 15,381)			
Postal receipts*	$ 12,999	— 1	+ 19
Building permits, less federal contracts	$ 98,007	+130	**
Bank debits (thousands)	$ 9,974	— 11	.....
End-of-month deposits (thousands)‡	$ 11,520	— 2	.....
Annual rate of deposit turnover	10.3	— 7	.....
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployed (area)	4.8	— 14	+ 33
COLORADO CITY (pop. 6,457)			
Retail sales			
Lumber, building material, and hardware stores	— 2†	— 27	— 35
Building permits, less federal contracts	$ 39,100	.....	+186
Bank debits (thousands)	$ 4,203	— 13	— 2
End-of-month deposits (thousands)‡	$ 6,807	— 3	+ 5
Annual rate of deposit turnover	7.3	— 10	— 5
COPPERAS COVE (pop. 4,567)			
Postal receipts*	$ 1,997	— 5	+ 11
Building permits, less federal contracts	$ 213,400	+ 31	+188
Bank debits (thousands)	$ 932	+ 7	+ 36
End-of-month deposits (thousands)‡	$ 731	— 12	+ 38
Annual rate of deposit turnover	14.3	+ 8	— 3
CORPUS CHRISTI (pop. 167,690)			
Retail sales	— 2†	— 29	— 20
Apparel stores	**	— 27	— 29
Automotive stores	— 10†	— 36	— 17
Postal receipts*	$ 157,178	— 2	— 4
Building permits, less federal contracts	$ 1,583,872	— 38	+ 20
Bank debits (thousands)	$ 190,524	— 2	— 2
End-of-month deposits (thousands)‡	$ 107,013	+ 1	— 1
Annual rate of deposit turnover	21.5	— 2	**
Employment (area)	62,900	**	— 3
Manufacturing employment (area)	8,630	+ 1	+ 2
Percent unemployed (area)	7.5	— 9	+ 10
CORSICANA (pop. 20,344)			
Postal receipts*	$ 15,887	— 40	— 57
Building permits, less federal contracts	$ 65,375	+ 32	— 76
Bank debits (thousands)	$ 15,428	— 3	— 11
End-of-month deposits (thousands)‡	$ 18,792	— 3	— 2
Annual rate of deposit turnover	9.7	**	— 9
CRYSTAL CITY (pop. 9,101)			
Postal receipts*	$ 2,835	— 7	— 6
Building permits, less federal contracts	$ 16,350	— 84	— 82
Bank debits (thousands)	$ 2,079	— 21	— 15
End-of-month deposits (thousands)‡	$ 2,690	+ 4	+ 6
Annual rate of deposit turnover	9.5	— 25	— 17
DALLAS (pop. 679,684)			
Retail sales	— 2†	— 4	— 13
Apparel stores	— 3†	— 16	— 18
Automotive stores	— 5†	— 12	— 14
Eating and drinking places	— 1†	**	+ 1
Food stores	— 3†	+ 3	— 5
Furniture and household appliance stores	+ 1†	— 1	— 23
Jewelry stores	.....	— 15	— 18
Liquor stores	.....	+ 9	— 15
Lumber, building material, and hardware stores	— 4†	+ 5	— 7
Office, store, and school supply dealers	— 11†	— 23	— 10
Postal receipts*	$ 2,275,954	**	+ 7
Building permits, less federal contracts	$13,023,366	— 42	+ 7
Bank debits (thousands)	$ 2,850,231	— 12	+ 7
End-of-month deposits (thousands)‡	$ 1,231,084	+ 4	+ 10
Annual rate of deposit turnover	28.3	— 17	— 2
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployed (area)	4.8	— 14	+ 33
DEER PARK (pop. 4,865)			
Building permits, less federal ocntracts	$ 315,816	+294	+ 58
Bank debits (thousands)	$ 3,566	— 6	+ 16
End-of-month deposits (thousands)‡	$ 1,932	— 18	+ 25
Annual rate of deposit turnover	20.0	— 8	— 7
Employment (area)	512,800	**	+ 3
Manufacturing employment (area)	93,250	**	— 2
Percent unemployed (area)	4.7	— 2	+ 12
DEL RIO (pop. 18,612)			
Retail sales	— 2†	— 5	— 7
Automotive stores	— 10†	**	— 2
Lumber, building material, and hardware stores	— 2†	— 10	— 14
Postal receipts*	$ 10,398	— 21	— 18
Building permits, less federal contracts	$ 44,460	— 31	— 72
Bank debits (thousands)	$ 9,054	— 8	— 3
End-of-month deposits (thousands)‡	$ 12,476	+ 1	+ 8
Annual rate of deposit turnover	8.7	— 9	— 8
DENISON (pop. 22,748)			
Retail sales	— 2†	— 15	— 14
Automotive stores	— 10†	— 17	— 14
Drug stores	— 3†	+ 4	+ 10
Postal receipts*	$ 19,378	**	+ 1
Buliding permits, less federal contracts	$ 210,101	+ 7	+ 78
Bank debits (thousands)	$ 17,439	— 4	— 6
End-of-month deposits (thousands)‡	$ 16,126	+ 15	+ 17
Annual rate of deposit turnover	13.9	— 10	— 11
DENTON (pop. 26,844)			
Retail sales	— 2†	— 25	— 21
Drug stores	— 3†	— 8	— 12
Postal receipts*	$ 27,114	— 13	+ 7
Building permits, less federal contracts	$ 283,750	— 66	+ 30
Bank debits (thousands)	$ 17,370	— 16	— 10
End-of-month deposits (thousands)‡	$ 18,926	— 1	+ 5
Annual rate of deposit turnover	11.0	— 15	— 12
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployed (area)	4.8	— 14	+ 33
DONNA (pop. 7,522)			
Postal receipts*	$ 3,340	— 10	+ 22
Building permits, less federal contracts	$ 92,050	+264	+ 82
Bank debits (thousands)	$ 3,503	+ 9	+ 3
End-of-month deposits (thousands)‡	$ 2,625	+ 13	+ 3
Annual rate of deposit turnover	17.0	+ 7	+ 8
EDINBURG (pop. 18,706)			
Postal receipts*	$ 9,855	+ 2	+ 9
Building permits, less federal contracts	$ 101,995	— 31	— 5
Bank debits (thousands)	$ 12,217	— 12	— 7
End-of-month deposits (thousands)‡	$ 10,031	+ 14	+ 6
Annual rate of deposit turnover	15.6	— 17	— 5
EL PASO (pop. 276,687)			
Retail sales	— 2†	— 8	— 11
Automotive stores	— 10†	— 9	+ 18
General merchandise stores	— 4†	— 8	— 14
Lumber, building material, and hardware stores	— 2†	— 17	— 29
Postal receipts*	$ 273,356	— 3	+ 1
Building permits, less federal contracts	$ 3,563,025	— 29	— 16
Bank debits (thousands)	$ 307,384	— 21	— 8
End-of-month deposits (thousands)‡	$ 182,514	+ 4	+ 9
Annual rate of deposit turnover	20.6	— 18	— 15
Employment (area)	90,800	+ 1	**
Manufacturing employment (area)	13,620	+ 1	— 5
Percent unemployed (area)	5.7	— 5	+ 6

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
EDNA (pop. 5,038)			
Postal receipts*	$ 4,406	+ 9	— 5
Building permits, less federal contracts	$ 36,938	— 44	.....
Bank debits (thousands)	$ 3,464	— 18	— 20
End-of-month deposits (thousands)‡	$ 5,709	— 3	— 5
Annual rate of deposit turnover	7.2	— 16	— 14
FORT WORTH (pop. 356,268)			
Retail sales	+ 1†	— 7	— 11
Apparel stores	+ 10†	— 3	— 24
Automotive stores	— 8†	— 21	— 24
Drug stores	— 6†	— 7	— 12
Eating and drinking places	+ 2†	+ 1	+ 1
Food stores	+ 3†	+ 2	+ 3
Furniture and household appliance stores	**†	— 17	— 8
Gasoline and service stations	+ 1†	**	— 4
General merchandise stores	+ 1†	— 12	— 19
Liquor stores	.....	— 6	— 16
Lumber, building material, and hardware stores	— 1†	— 4	— 14
Postal receipts*	$ 710,087	— 1	**
Building permits, less federal contracts	$ 8,137,344	+ 68	+ 51
Bank debits (thousands)	$ 701,651	— 14	— 5
End-of-month deposits (thousands)‡	$ 370,170	+ 1	+ 3
Annual rate of deposit turnover	22.9	— 13	— 7
Employment (area)	211,500	+ 1	+ 1
Manufacturing employment (area)	53,550	**	— 1
Percent unemployed (area)	5.3	— 9	+ 28
FREDERICKSBURG (pop. 4,629)			
Retail sales	— 2†	— 10	— 4
Food stores	— 3†	+ 4	+ 8
General merchandise stores	— 4†	— 10	— 4
Postal receipts*	$ 4,927	+ 1	+ 24
Building permits, less federal contracts	$ 17,640	— 77	— 31
Bank debits (thousands)	$ 5,757	— 10	— 5
End-of-month deposits (thousands)‡	$ 8,033	+ 9	— 1
Annual rate of deposit turnover	9.0	— 13	+ 1
GALENA PARK (pop. 10,852)			
Building permits, less federal contracts	$ 28,070	— 58	+ 33
Bank debits (thousands)	$ 3,949	— 7	— 2
End-of-month deposits (thousands)‡	$ 5,305	— 2	+ 27
Annual rate of deposit turnover	8.8	— 4	— 20
Employment (area)	512,800	**	+ 3
Manufacturing employment (area)	93,250	**	— 2
Percent unemployed (area)	4.7	— 2	+ 12
GATESVILLE (pop. 4,626)			
Postal receipts*	$ 3,358	— 60	— 2
Bank debits (thousands)	$ 4,512	+ 1	— 2
End-of-month deposits (thousands)‡	$ 5,181	— 1	— 4
Annual rate of deposit turnover	10.4	+ 1	+ 1
GARLAND (pop. 38,501)			
Retail sales			
Automotive stores	— 10†	— 22	— 19
Postal receipts*	$ 29,041	+ 1	+ 7
Building permits, less federal contracts	$ 1,302,724	+ 25	— 15
Bank debits (thousands)	$ 22,432	— 20	— 2
End-of-month deposits (thousands)‡	$ 15,959	— 2	+ 22
Annual rate of deposit turnover	16.7	— 21	— 20
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployed (area)	4.8	— 14	+ 33
GIDDINGS (pop. 2,821)			
Postal receipts*	$ 2,799	— 15	— 4
Building permits, less federal contracts	$ 16,775	+ 20	— 76
Bank debits (thousands)	$ 2,475	— 7	— 1
End-of-month deposits (thousands)‡	$ 3,714	+ 3	**
Annual rate of deposit turnover	8.1	— 6	— 1
GALVESTON (pop. 67,175)			
Retail sales	— 2†	— 22	— 14
Apparel stores	**†	— 8	— 21
Automotive stores	— 10†	— 35	— 15
Food stores	— 3†	+ 5	+ 1
Furniture and household appliance stores	— 1†	— 21	— 11
Postal receipts*	$ 92,678	+ 21	+ 14
Building permits, less federal contracts	$ 296,511	— 90	+250
Bank debits (thousands)	$ 84,976	— 13	— 4
End-of-month deposits (thousands)‡	$ 63,865	+ 3	— 1
Annual rate of deposit turnover	16.2	— 13	— 2
Employment (area)	53,000	**	+ 4
Manufacturing employment (area)	10,720	**	— 3
Percent unemployed (area)	7.0	+ 8	+ 19
GILMER (pop. 4,312)			
Retail sales			
Lumber, building material, and hardware stores	— 2†	— 11	— 26
Postal receipts*	$ 4,341	— 31	— 33
Building permits, less federal contracts	$ 10,000	+ 67	— 44
GLADEWATER (pop. 5,742)			
Postal receipts*	$ 5,728	+ 8	+ 10
Building permits, less federal contracts	$ 3,490	— 95	— 86
Bank debits (thousands)	$ 3,457	— 5	— 6
End-of-month deposits (thousands)‡	$ 4,754	— 3	+ 18
Annual rate of deposit turnover	8.6	— 2	— 20
Employment (area)	28,300	+ 1	**
Manufacturing employment (area)	5,580	+ 1	+ 9
Percent unemployed (area)	4.0	— 11	+ 14
GOLDTHWAITE (pop. 1,383)			
Postal receipts*	$ 1,535	— 8	+ 14
Bank debits (thousands)	$ 4,117	— 1	— 8
End-of-month deposits (thousands)‡	$ 3,396	— 2	— 1
Annual rate of deposit turnover	14.4	— 3	— 5
GRAHAM (pop. 8,505)			
Postal receipts*	$ 7,873	— 4	**
Building permits, less federal contracts	$ 25,710	— 71	— 75
Bank debits (thousands)	$ 8,322	— 6	— 10
End-of-month deposits (thousands)‡	$ 9,819	— 1	— 7
Annual rate of deposit turnover	10.1	— 6	— 6
GRAND PRAIRIE (pop. 30,386)			
Postal receipts*	$ 22,326	+ 10	+ 12
Building permits, less federal contracts	$ 266,955	— 16	— 18
Bank debits (thousands)	$ 13,176	— 14	.....
End-of-month deposits (thousands)‡	$ 12,246	— 3	.....
Annual rate of deposit turnover	12.7	— 14	.....
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployed (area)	4.8	— 14	+ 33
GREENVILLE (pop. 19,087)			
Retail sales	— 2†	— 3	— 9
Drug stores	— 3†	— 7	+ 5
Lumber, building material, and hardware stores	— 2†	— 12	— 31
Postal receipts*	$ 21,012	— 7	+ 6
Building permits, less federal contracts	$ 63,980	— 76	— 79
Bank debits (thousands)	$ 13,934	— 3	— 6
End-of-month deposits (thousands)‡	$ 16,811	+ 4	+ 12
Annual rate of deposit turnover	10.1	— 7	— 14
HENDERSON (pop. 9,666)			
Retail sales	— 2†	— 12	— 16
Apparel stores	**†	— 9	— 31
Automotive stores	— 10†	— 16	— 14
Postal receipts*	$ 8,132	— 20	— 23
Building permits, less federal contracts	$ 141,600	+454	— 39
Bank debits (thousands)	$ 7,221	**	**
End-of-month deposits (thousands)‡	$ 14,932	**	— 4
Annual rate of deposit turnover	5.8	**	+ 5

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
HARLINGEN (pop. 41,207)			
Retail sales	— 2†	— 10	— 4
Automotive stores	— 10†	— 17	**
Furniture and household appliance stores	— 1†	**	— 23
Postal receipts* $	34,173	— 10	+ 15
Building permits, less federal contracts $	197,200	— 76	— 36
Bank debits (thousands) $	35,973	— 11	— 6
End-of-month deposits (thousands)‡ $	26,044	— 3	+ 2
Annual rate of deposit turnover	16.3	— 9	— 9
HALE CENTER (pop. 2,196)			
Postal receipts* $	1,479	+ 6	+ 9
Building permits, less federal contracts $	22,750	— 25	— 40
Bank debits (thousands) $	2,040	— 12	— 3
End-of-month deposits (thousands)‡ $	3,794	— 13	+ 2
Annual rate of deposit turnover	6.0	— 2	— 5
HEREFORD (pop. 7,652)			
Postal receipts* $	6,472	— 10	— 18
Building permits, less federal contracts $	119,600	+ 40	+ 40
Bank debits (thousands) $	12,258	— 9	+ 12
End-of-month deposits (thousands)‡ $	10,914	— 6	+ 5
Annual rate of deposit turnover	13.1	— 7	+ 7
HOUSTON (pop. 938,219)			
Retail sales	— 3†	— 6	— 2
Apparel stores	+ 2†	— 9	— 21
Automotive stores	— 10†	— 12	— 6
Drug stores	— 4†	— 8	— 12
Eating and drinking places	— 5†	— 8	— 6
Food stores	— 3†	— 4	+ 9
Furniture and household appliance stores	**	+ 35	**
Gasoline and service stations	— 3†	— 3	+ 7
General merchandise stores	+ 2†	— 10	— 18
Liquor stores	— 4†	— 3	— 1
Lumber, building material, and hardware stores	— 8†	— 15	+ 20
Postal receipts* $	1,577,613	— 2	+ 3
Building permits, less federal contracts $	15,809,481	— 34	+ 12
Bank debits (thousands) $	2,468,563	— 13	— 1
End-of-month deposits (thousands)‡ $	1,324,003	+ 2	+ 5
Annual rate of deposit turnover	22.6	— 13	— 6
Employment (area)	512,800	**	+ 3
Manufacturing employment (area)	93,250	**	— 2
Percent unemployed (area)	4.7	— 2	+ 12
JACKSONVILLE (pop. 9,590)			
Postal receipts* $	15,254	— 19	+ 7
Building permits, less federal contracts $	140,200	— 42	+ 27
Bank debits (thousands) $	9,781	— 3	— 4
End-of-month deposits (thousands)‡ $	8,748	+ 3	+ 9
Annual rate of deposit turnover	13.6	— 4	— 9
JASPER (pop. 4,889)			
Retail sales	— 2†	— 3	— 4
Automotive stores	— 10†	+ 6	— 14
Postal receipts* $	7,771	+ 17	+ 20
Building permits, less federal contracts $	14,550	— 77	.....
Bank debits (thousands) $	7,590	— 3	**
End-of-month deposits (thousands)‡ $	8,786	+ 3	**
Annual rate of deposit turnover	10.5	— 3	**
KENEDY (pop. 4,301)			
Retail sales			
Lumber, building material, and hardware stores	— 2†	— 1	+ 14
Postal receipts* $	3,311	— 24	— 11
Building permits, less federal contracts $	30,000	— 29	— 64
KILGORE (pop. 10,092)			
Postal receipts* $	12,638	— 12	— 11
Building permits, less federal contracts $	105,900	— 6	— 11
Bank debits (thousands) $	11,951	— 5	— 11
End-of-month deposits (thousands)‡ $	13,153	— 1	— 8
Annual rate of deposit turnover	10.9	— 4	— 2
Employment (area)	28,300	+ 1	**
Manufacturing employment (area)	5,580	+ 1	+ 9
Percent unemployed (area)	4.0	— 11	+ 14
KILLEEN (pop. 23,377)			
Postal receipts* $	24,460	+ 11	— 3
Building permits, less federal contracts $	124,578	— 79	— 74
Bank debits (thousands) $	9,718	— 3	— 10
End-of-month deposits (thousands)‡ $	8,522	+ 4	+ 16
Annual rate of deposit turnover	14.0	— 5	— 19
KINGSVILLE (pop. 25,297)			
Postal receipts* $	13,964	— 7	+ 9
Building permits, less federal contracts $	69,312	— 60	— 60
Bank debits (thousands) $	11,013	— 3	+ 5
End-of-month deposits (thousands)‡ $	11,667	— 9	— 6
Annual rate of deposit turnover	10.8	**	+ 7
LA FERIA (pop. 3,047)			
Postal receipts* $	2,238	— 35	+ 17
Building permits, less federal contracts $	2,700	— 19	— 89
Bank debits (thousands) $	1,433	— 17	.....
End-of-month deposits (thousands)‡ $	1,240	— 5	.....
Annual rate of deposit turnover	13.5	— 13	.....
LA MARQUE (pop. 13,969)			
Postal receipts* $	7,898	+ 15	+ 14
Building permits, less federal contracts $	57,010	— 53	— 64
Bank debits (thousands) $	6,855	— 12	+ 1
End-of-month deposits (thousands)‡ $	4,734	+ 6	— 19
Annual rate of deposit turnover	17.9	— 2	+ 31
Employment (area)	53,000	**	+ 4
Manufacturing employment (area)	10,720	**	— 3
Percent unemployed (area)	7.0	+ 8	+ 19
LAMPASAS (pop. 5,061)			
Postal receipts* $	4,341	— 7	— 3
Building permits, less federal contracts $	59,850	+ 44	+158
Bank debits (thousands) $	6,651	— 6	**
End-of-month deposits (thousands)‡ $	6,481	+ 2	+ 5
Annual rate of deposit turnover	12.4	— 7	— 2
LAMESA (pop. 12,438)			
Retail sales	— 2†	+ 8	— 9
Automotive stores	— 10†	+ 39	— 12
Drug stores	— 3†	— 8	+ 2
Postal receipts* $	8,542	— 22	— 23
Building permits, less federal contracts $	170,100	— 60	— 6
Bank debits (thousands) $	14,518	— 4	+ 2
End-of-month deposits (thousands)‡ $	15,256	— 9	+ 4
Annual rate of deposit turnover	10.9	+ 7	— 4
LAREDO (pop. 60,678)			
Postal receipts* $	31,331	— 10	+ 4
Building permits, less federal contracts $	46,875	— 44	— 72
Bank debits (thousands) $	29,833	— 2	— 1
End-of-month deposits (thousands)‡ $	20,888	— 4	— 6
Annual rate of deposit turnover	16.8	+ 1	+ 4
LOCKHART (pop. 6,084)			
Retail sales			
Apparel stores	**†	— 1	— 28
Automotive stores	— 10†	— 4	— 34
Postal receipts* $	3,520	— 15	+ 7
Building permits, less federal contracts $	750	— 94	— 94
Bank debits (thousands) $	4,099	— 5	— 14
End-of-month deposits (thousands)‡ $	5,116	— 3	+ 4
Annual rate of deposit turnover	9.5	— 6	— 17

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
LLANO (pop. 2,656)			
Postal receipts*	$ 1,855	— 25	+ 16
Bank debits (thousands)	$ 2,719	— 9	+ 5
End-of-month deposits (thousands)‡	$ 3,618	— 3	+ 2
Annual rate of deposit turnover	8.9	— 10	**
LEVELLAND (pop. 10,153)			
Postal receipts*	$ 7,271	— 2	+ 11
Building permits, less federal contracts	$ 139,240	— 14	+188
Bank debits (thousands)	$ 10,217	.....	.....
End-of-month deposits (thousands)‡	$ 10,321	.....	.....
LONGVIEW (pop. 40,050)			
Retail sales	— 2†	— 20	— 14
Food stores	— 3†	— 2	— 4
Lumber, building material, and hardware stores	— 2†	+ 18	— 9
Postal receipts*	$ 47,496	+ 2	+ 14
Building permits, less federal contracts	$ 916,800	+ 19	— 7
Bank debits (thousands)	$ 43,013	— 7	**
End-of-month deposits (thousands)‡	$ 34,621	+ 1	— 4
Annual rate of deposit turnover	15.0	— 8	+ 4
Employment (area)	28,300	+ 1	**
Manufacturing employment (area)	5,580	+ 1	+ 9
Percent unemployed (area)	4.0	— 11	+ 14
LOWER RIO GRANDE VALLEY (pop. 352,086) Cameron, Hidalgo and Willacy Counties			
Retail sales	— 2†	— 6	— 4
Apparel stores	**†	— 26	— 22
Automotive stores	— 10†	— 8	— 4
Drug stores	— 3†	— 9	+ 5
Food stores	— 3†	— 5	+ 1
Furniture and household appliance stores	— 1†	— 4	— 19
Gasoline and service stations	— 3†	+ 1	+ 4
General merchandise stores	— 4†	+ 9	— 8
Lumber, building material, and hardware stores	— 2†	+ 13	— 3
Postal receipts*	$	— 13	+ 2
Building permits, less federal contracts	$	— 12	+ 41
Bank debits (thousands)	$	— 4	**
End-of-month deposits (thousands)‡	$	— 2	+ 2
Annual rate of deposit turnover	15.9	— 2	— 2
LOS FRESNOS (pop. 1,289)			
Postal receipts*	$ 879	— 15	+ 1
Building permits, less federal contracts	$ 9,000	— 67	— 31
Bank debits (thousands)	$ 1,388	+ 15	+ 8
End-of-month deposits (thousands)‡	$ 1,225	— 8	— 5
Annual rate of deposit turnover	13.0	+ 11	+ 11
LUBBOCK (pop. 128,691)			
Retail sales			
Automotive stores	— 10†	+ 13	— 21
Furniture and household appliance stores	— 1†	— 11	+ 20
Postal receipts*	$ 158,290	+ 8	+ 13
Building permits, less federal contracts	$ 3,121,493	— 55	— 34
Bank debits (thousands)	$ 175,484	— 16	— 11
End-of-month deposits (thousands)‡	$ 111,574	— 3	— 2
Annual rate of deposit turnover	18.6	— 14	— 9
Employment (area)	50,100	**	— 7
Manufacturing employment (area)	5,590	+ 3	+ 1
Percent unemployed (area)	4.7	**	+ 38
LUFKIN (pop. 17,641)			
Retail sales			
Automotive stores	— 10†	+ 21	+ 7
Postal receipts*	$ 17,081	— 23	— 18
Building permits, less federal contracts	$ 875,113	+374	+ 3

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
McALLEN (pop. 32,728)			
Retail sales	— 2†	— 7	— 6
Apparel stores	**	— 28	— 21
Automotive stores	— 10†	+ 3	— 2
Postal receipts*	$ 25,313	— 11	— 1
Building permits, less federal contracts	$ 734,550	+105	+150
Bank debits (thousands)	$ 29,167	— 6	— 3
End-of-month deposits (thousands)‡	$ 21,597	+ 4	+ 12
Annual rate of deposit turnover	16.5	— 6	— 12
McCAMEY (pop. 3,375)			
Postal receipts*	$ 2,507	— 17	+ 8
Bank debits (thousands)	$ 1,724	— 13	— 15
End-of-month deposits (thousands)‡	$ 2,109	— 4	+ 5
Annual rate of deposit turnover	9.6	— 14	— 20
McKINNEY (pop. 13,763)			
Postal receipts*	$ 10,942	+ 26	+ 17
Building permits, less federal contracts	$ 25,825	— 75	— 77
Bank debits (thousands)	$ 8,753	— 2	— 13
End-of-month deposits (thousands)‡	$ 8,571	— 4	— 29
Annual rate of deposit turnover	12.0	+ 17	+ 22
MARSHALL (pop. 23,846)			
Retail sales	— 2†	— 14	— 23
Apparel stores	**	— 18	— 40
Postal receipts*	$ 24,514	+ 9	+ 1
Building permits, less federal contracts	$ 344,704	+212	+ 97
Bank debits (thousands)	$ 16,519	— 10	— 7
End-of-month deposits (thousands)‡	$ 19,478	— 9	+ 2
Annual rate of deposit turnover	9.7	— 9	— 12
MESQUITE (pop. 27,526)			
Postal receipts*	$ 11,068	+ 6	+ 37
Building permits, less federal contracts	$ 1,234,868	+ 32	— 17
Bank debits (thousands)	$ 5,055	— 7	— 13
End-of-month deposits (thousands)‡	$ 4,518	+ 8	— 5
Annual rate of deposit turnover	14.0	— 7	+ 5
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployed (area)	4.8	— 14	+ 33
MERCEDES (pop. 10,943)			
Postal receipts*	$ 4,603	— 23	+ 2
Building permits, less federal contracts	$ 26,730	— 2	— 2
Bank debits (thousands)	$ 6,037	**	+ 3
End-of-month deposits (thousands)‡	$ 3,906	— 2	+ 1
Annual rate of deposit turnover	18.3	**	+ 3
MIDLAND (pop. 62,625)			
Retail sales			
Drug stores	— 3†	+ 2	+ 5
Postal receipts	$ 71,112	— 27	— 8
Building permits, less federal contracts	$ 1,122,970	+ 9	— 31
Employment (area)	53,100	**	.....
Manufacturing employment (area)	2,300	**	.....
Percent unemployed (area)	4.1	— 11	.....
MIDLOTHIAN (pop. 1,521)			
Building permits, less federal contracts	$ 22,200	+ 24	.....
Bank debits (thousands)	$ 1,001	— 6	— 8
End-of-month deposits (thousands)‡	$ 1,488	+ 1	— 2
Annual rate of deposit turnover	8.1	— 2	— 5
MINERAL WELLS (pop. 11,053)			
Retail sales	— 2†	— 16	— 20
Automotive stores	— 10†	— 28	— 34
Postal receipts*	$ 12,672	+ 11	+ 4
Building permits, less federal contracts	$ 91,100	+ 55	+ 64
MISSION (pop. 14,081)			
Postal receipts*	$ 6,727	— 25	— 13
Building permits, less federal contracts	$ 120,303	+ 10	+ 20
Bank debits (thousands)	$ 11,349	— 4	— 9
End-of-month deposits (thousands)‡	$ 8,709	— 2	— 24
Annual rate of deposit turnover	15.5	— 1	+ 17

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
MONAHANS (pop. 8,567)			
Postal receipts*	$ 7,826	— 2	+ 2
Building permits, less federal contracts	$ 17,225	— 85	— 91
Bank debits (thousands)	$ 8,949	— 11	+ 8
End-of-month deposits (thousands)‡	$ 7,710	+ 2	+ 3
Annual rate of deposit turnover	14.0	— 11	+ 8
MOUNT PLEASANT (pop. 8,027)			
Building permits, less federal contracts	$ 32,450	+ 43	— 73
Bank debits (thousands)	$ 8,103	— 10	+ 1
End-of-month deposits (thousands)‡	$ 8,845	+ 1	+ 4
Annual rate of deposit turnover	11.1	— 10	— 1
MUENSTER (pop. 1,190)			
Retail sales			
Automotive stores	— 10†	— 37	+ 7
Postal receipts*	$ 1,320	— 41	— 12
Building permits, less federal contracts	$ 800	.....	— 97
Bank debits (thousands)	$ 1,917	+ 12	+ 31
End-of-month deposits (thousands)‡	$ 1,660	**	— 5
Annual rate of deposit turnover	13.3	+ 15	+ 25
NACOGDOCHES (pop. 12,674)			
Retail sales			
Apparel stores	**	+ 28	+ 13
Postal receipts*	$ 14,858	— 6	— 2
Building permits, less federal contracts	$ 56,723	— 79	+ 23
Bank debits (thousands)	$ 14,814	— 6	**
End-of-month deposits (thousands)‡	$ 14,823	+ 1	+ 7
Annual rate of deposit turnover	12.0	— 5	— 6
NEW BRAUNFELS (pop. 15,631)			
Postal receipts*	$ 18,430	+ 10	+ 12
Building permits, less federal contracts	$ 474,598	+ 43	+109
Bank debits (thousands)	$ 11,128	+ 1	+ 10
End-of-month deposits (thousands)‡	$ 10,414	+ 2	— 2
Annual rate of deposit turnover	12.9	— 1	+ 16
ODESSA (pop. 80,338)			
Retail sales			
Furniture and household appliance stores	— 1†	— 13	— 3
Postal receipts*	$ 64,235	— 12	— 4
Building permits, less federal contracts	$ 1,224,615	+ 19	— 15
Employment (area)	53,100	**	.....
Manufacturing employment (area)	2,300	**	.....
Percent unemployed (area)	4.1	— 11	.....
ORANGE (pop. 25,605)			
Retail sales			
Apparel stores	**†	— 13	— 28
Automotive stores	— 10†	— 7	—27
Postal receipts*	$ 23,005	+ 1	+ 5
Building permits, less federal contracts	$ 306,009	+ 5	+ 23
Bank debits (thousands)	$ 26,095	— 7	+ 7
End-of-month deposits (thousands)‡	$ 21,919	**	+ 7
Annual rate of deposit turnover	14.3	— 7	+ 1
Employment (area)	107,300	+ 1	+ 2
Manufacturing employment (area)	33,920	+ 1	+ 1
Percent unemployed (area)	8.0	+ 5	+ 13
PAMPA (pop. 24,664)			
Retail sales	— 2†	— 9	— 21
Automotive stores	— 10†	— 22	+ 1
Eating and drinking places	— 2†	+ 5	— 11
Lumber, building material, and hardware stores	— 2†	+ 9	— 58
Postal receipts*	$ 21,828	— 8	— 5
Building permits, less federal contracts	$ 216,260	— 55	— 67
Bank debits (thousands)	$ 22,537	— 13	+ 3
End-of-month deposits (thousands)‡	$ 21,985	+ 1	— 3
Annual rate of deposit turnover	12.4	— 12	+ 11
PALESTINE (pop. 13,974)			
Postal receipts*	$ 13,114	— 1	+ 5
Building permits, less federal contracts	$ 139,978	+ 11	+ 84
Bank debits (thousands)	$ 11,137	+ 15	— 2
End-of-month deposits (thousands)‡	$ 14,104	— 3	+ 1
Annual rate of deposit turnover	9.8	+ 9	— 3
PARIS (pop. 20,977)			
Retail sales	— 2†	+ 1	— 13
Apparel stores	**†	— 28	— 39
Automotive stores	— 10†	+ 13	— 1
Food stores	— 3†	— 1	— 4
Postal receipts*	$ 17,016	— 12	— 6
Building permits, less federal contracts	$ 389,442	+ 98	— 4
Bank debits (thousands)	$ 15,033	— 8	— 5
End-of-month deposits (thousands)‡	$ 15,209	+ 1	+ 21
Annual rate of deposit turnover	11.9	— 14	— 21
PASADENA (pop. 58,737)			
Postal receipts*	$ 33,470	+ 10	+ 1
Building permits, less federal contracts	$ 1,613,307	+ 72	+ 16
Bank debits (thousands)	$ 33,189	— 20	— 2
End-of-month deposits (thousands)‡	$ 21,519	— 13	— 3
Annual rate of deposit turnover	17.2	— 20	— 7
Employment (area)	512,800	**	+ 3
Manufacturing employment (area)	93,250	**	— 2
Percent unemployed (area)	4.7	— 2	+ 12
PHARR (pop. 14,106)			
Postal receipts*	$ 5,618	— 5	— 14
Building permits, less federal contracts	$ 140,065	+415	+192
Bank debits (thousands)	$ 4,245	— 7	— 5
End-of-month deposits (thousands)‡	$ 4,150	— 9	— 3
Annual rate of deposit turnover	11.7	— 2	— 3
PLAINVIEW (pop. 18,735)			
Retail sales	— 2†	— 19	— 17
Apparel stores	**†	— 21	— 25
Automotive stores	— 10†	— 24	— 21
Postal receipts*	$ 17,851	+ 3	+ 2
Building permits, less federal contracts	$ 563,550	+ 82	+178
Bank debits(thousands)	$ 27,244	— 10	— 4
End-of-month deposits (thousands)‡	$ 24,151	— 6	— 2
Annual rate of deposit turnover	13.1	— 6	— 3
PLANO (pop. 3,695)			
Bank debits (thousands)	$ 1,684	+ 4	— 7
End-of-month deposits (thousands)‡	$ 1,920	+ 5	+ 4
Annual rate of deposit turnover	10.8	+ 1	— 3
PORT ARTHUR (pop. 66,676)			
Retail sales	— 2†	— 12	— 14
Automotive stores	— 10†	— 17	— 18
Furniture and household appliance stores	— 1†	+ 2	— 1
Lumber, building material, and hardware stores	— 2†	+ 4	— 2
Postal receipts*	$ 51,377	+ 2	— 10
Building permits, less federal contracts	$ 378,419	+ 17	+ 38
Bank debits (thousands)	$ 62,336	— 10	— 5
End-of-month deposits (thousands)‡	$ 41,964	**	+ 1
Annual rate of deposit turnover	17.9	— 9	— 5
Employment (area)	107,300	+ 1	+ 2
Manufacturing employment (area)	33,920	+ 1	+ 1
Percent unemployed (area)	8.0	+ 5	+ 13
PORT ISABEL (pop. 3,575)			
Postal receipts*	$ 1,658	— 28	— 16
Building permits, less federal contracts	$ 19,400	+2325	+676
Bank debits (thousands)	$ 585	+ 2	.....
End-of-month deposits (thousands)‡	$ 546	— 6	.....
Annual rate of deposit turnover	12.5	+ 9	.....

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
RAYMONDVILLE (pop. 9,385)			
Postal receipts*	$ 5,764	— 11	+ 28
Building permits, less federal contracts	$ 23,450	+134	+703
Bank debits (thousands)	$ 5,498	— 10	— 9
End-of-month deposits (thousands)‡	$ 6,759	— 5	— 7
Annual rate of deposit turnover	9.5	— 6	— 2
RICHARDSON (pop. 16,810)			
Postal receipts*	$ 17,422	— 22	+ 10
Building permits, less federal contracts	$ 1,886,900	— 10	+ 42
Bank debits (thousands)	$ 9,293	+ 6	+ 21
End-of-month deposits (thousands)‡	$ 5,999	+ 21	+ 28
Annual rate of deposit turnover	20.4	**	+ 6
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployment (area)	4.8	— 14	+ 33
ROCKDALE (pop. 4,481)			
Postal receipts*	$ 4,133	— 11	+ 22
Building permits, less federal contracts	$ 5,650	— 81	— 22
Bank debits (thousands)	$ 3,487	— 13	— 15
End-of-month deposits (thousands)‡	$ 5,496	— 3	+ 1
Annual rate of deposit turnover	7.5	— 12	— 18
SAN ANGELO (pop. 58,815)			
Retail sales	— 2†	— 12	— 14
Jewelry stores	.....	— 1	— 10
Postal receipts*	$ 66,925	— 2	+ 11
Building permits, less federal contracts	$ 612,909	+ 17	+ 1
Bank debits (thousands)	$ 47,527	— 7	— 10
End-of-month deposits (thousands)‡	$ 45,786	— 1	+ 8
Annual rate of deposit turnover	12.4	— 7	— 14
Employment (area)	19,850	**	— 14
Manufacturing employment (area)	3,000	+ 2	— 7
Percent unemployed (area)	5.9	— 11	+ 11
SAN ANTONIO (pop. 587,718)			
Retail sales	— 5‡	— 10	— 12
Apparel stores	**†	— 25	— 21
Automotive stores	— 15†	— 15	— 9
Drug stores	— 3†	— 2	— 5
Eating and drinking places	— 3†	— 2	— 5
Food stores	— 2†	— 4	— 10
Furniture and household appliance stores	— 4†	— 3	+ 6
Gasoline and service stations	— 3†	— 7	— 11
General merchandise stores	— 9†	— 13	— 27
Jewelry stores	.....	+ 5	— 11
Lumber, building material, and hardware stores	— 1†	— 3	— 4
Stationery stores	.....	— 7	— 7
Postal receipts*	$ 679,406	— 1	**
Building permits, less federal contracts	$ 3,354,067	— 31	— 40
Bank debits (thousands)	$ 606,970	— 8	— 1
End-of-month deposits (thousands)‡	$ 877,676	— 1	+ 2
Annual rate of deposit turnover	19.2	— 9	— 4
Employment (area)	205,300	**	**
Manufacturing employment (area)	24,700	**	— 1
Percent unemployed (area)	5.0	— 6	+ 43
SAN JUAN (pop. 4,371)			
Postal receipts*	$ 2,120	+ 4	+ 11
Bank debits (thousands)	$ 1,859	**	+ 20
End-of-month deposits (thousands)‡	$ 1,993	— 2	+ 33
Annual rate of deposit turnover	11.3	— 5	+ 3
SAN MARCOS (pop. 12,713)			
Postal receipts*	$ 8,860	— 17	+ 13
Bank debits (thousands)	$ 6,409	— 6	+ 1
End-of-month deposits (thousands)‡	$ 7,800	— 1	+ 1
Annual rate of deposit turnover	9.8	— 3	**
SAN SABA (pop. 2,728)			
Postal receipts*	$ 2,577	+ 5	+ 13
Bank debits (thousands)	$ 4,039	+ 6	+ 10
End-of-month deposits (thousands)‡	$ 4,314	— 3	— 2
Annual rate of deposit turnover	11.1	+ 9	+ 9
SEAGOVILLE (pop. 3,745)			
Building permits, less federal contracts	$ 35,230	+813	+355
Bank debits (thousands)	$ 1,686	— 6	— 5
End-of-months deposits (thousands)‡	$ 1,184	+ 2	— 4
Annual rate of deposit turnover	17.2	— 8	— 1
Employment (area)	442,100	+ 1	+ 2
Manufacturing employment (area)	96,275	+ 1	+ 2
Percent unemployed (area)	4.8	— 14	+ 33
SEGUIN (pop. 14,299)			
Postal receipts*	$ 9,880	— 10	— 5
Building permits, less federal contracts	$ 87,800	+ 35	— 15
Bank debits (thousands)	$ 9,285	— 6	— 7
End-of-month deposits (thousands)‡	$ 13,498	— 1	+ 1
Annual rate of deposit turnover	8.2	— 6	— 7
SHERMAN (pop. 24,988)			
Retail sales	— 2†	— 3	— 3
Apparel stores	**†	— 1	— 35
Automotive stores	— 10†	+ 1	+ 5
Furniture and household appliance stores	— 1†	+ 7	+ 6
General merchandise stores	— 4†	— 15	— 18
Lumber, building material, and hardware stores	— 2†	+ 8	+ 71
Postal receipts*	$ 26,234	— 5	— 1
Building permits, less federal contracts	$ 504,677	+ 60	+ 16
Bank debits (thousands)	$ 24,378	— 6	— 5
End-of-month deposits (thousands)‡	$ 18,307	+ 1	+ 2
Annual rate of deposit turnover	16.0	— 6	— 3
SINTON (pop. 6,008)			
Postal receipts*	$ 4,481	— 19	— 17
Building permits, less federal contracts	$ 22,600	— 79	— 68
Bank debits (thousands)	$ 4,360	+ 6	— 2
End-of-month deposits (thousands)‡	$ 5,198	— 11	— 13
Annual rate of deposit turnover	9.5	+ 13	+ 8
SLATON (pop. 6,568)			
Postal receipts*	$ 3,029	— 26	— 4
Building permits, less federal contracts	$ 33,650	— 30	— 68
Bank debits (thousands)	$ 3,036	— 14	+ 3
End-of-month deposits (thousands)‡	$ 3,875	— 4	— 13
Annual rate of deposit turnover	9.2	— 9	+ 15
Employment (area)	50,100	**	— 7
Manufacturing employment (area)	5,590	+ 3	+ 1
Percent unemployed (area)	4.7	**	+ 38
SMITHVILLE (pop. 2,933)			
Postal receipts*	$ 1,637	— 2	— 5
Building permits, less federal contracts	$ 200	— 99	— 51
Bank debits (thousands)	$ 1,119	— 7	— 15
End-of-month deposits (thousands)*	$ 2,136	— 3	— 7
Annual rate of deposit turnover	6.2	— 5	— 10
SNYDER (pop. 13,850)			
Postal receipts	$ 9,859	— 35	— 25
Building permits, less federal contracts	$ 54,100	— 18	— 76
Bank debits (thousands)	$ 12,556	— 19	— 12
End-of-month deposits (thousands)‡	$ 12,760	— 23	— 28
Annual rate of deposit turnover	10.3	— 7	+ 7
SULPHUR SPRINGS (pop. 9,160)			
Postal receipts*	$ 7,223	— 2	— 1
Building permits, less federal contracts	$ 73,450	— 35	.....
Bank debits (thousands)	$ 9,336	— 4	— 2
End-of-month deposits (thousands)‡	$ 12,257	**	+ 4
Annual rate of deposit turnover	9.2	— 4	— 4

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
SWEETWATER (pop. 13,914)			
Postal receipts*	$ 10,138	— 28	— 18
Building permits, less federal contracts	$ 47,180	+128	— 73
Bank debits (thousands)	$ 9,348	— 9	— 15
End-of-month deposits (thousands)‡	$ 10,302	+ 1	— 1
Annual rate of deposit turnover	10.9	— 8	— 13
TAYLOR (pop. 9,434)			
Retail sales			
Automotive stores	— 10†	+ 2	— 7
Postal receipts*	$ 6,737	— 14	— 14
Building permits, less federal contracts	$ 30,090	+ 34	+ 1
Bank debits (thousands)	$ 6,540	— 6	— 7
End-of-month deposits (thousands)‡	$ 11,858	— 3	— 4
Annual rate of deposit turnover	6.5	— 4	— 4
TEMPLE (pop. 30,419)			
Retail sales	— 2†	— 17	— 13
Apparel stores	**†	+ 1	— 22
Furniture and household appliance stores	— 1†	— 13	— 8
Lumber, building material, and hardware stores	— 2†	— 17	— 20
Postal receipts*	$ 34,278	+ 5	— 1
Building permits, less federal contracts	$ 403,392	— 16	— 14
Bank debits (thousands)	$ 22,015	— 6	— 8
TERRELL (pop. 13,803)			
Postal receipts*	$ 5,756	— 18	— 13
Building permits, less federal contracts	$ 333,622	+806	.....
Bank debits (thousands)	$ 6,229	— 5	— 8
End-of-month deposits (thousands)‡	$ 6,543	— 5	— 11
Annual rate of deposit turnover	11.2	— 1	**
TEXARKANA, TEX. (pop. 30,218)			
Retail sales	— 2†	— 10	— 21
Apparel stores	**†	— 22	— 35
Furniture and household appliance stores	— 1†	— 4	— 14
Postal receipts*§	$ 47,777	— 12	— 2
Building permits, less federal contracts§	$ 139,461	— 82	— 77
Bank debits (thousands)	$ 47,592	— 3	— 9
End-of-month deposits (thousands)‡§	$ 17,218	**	+ 2
Annual rate of deposit turnover§	14.8	— 1	— 15
Employment (area)	28,650	+ 1	— 3
Manufacturing employment (area)	3,780	+ 4	+ 1
Percent unemployed (area)	7.7	— 14	— 4
TEXAS CITY (pop. 32,065)			
Retail sales			
Lumber, building material, and hardware stores	— 2†	— 4	— 2
Postal receipts*	$ 18,504	— 23	— 7
Building permits, less federal contracts	$ 188,740	— 55	— 48
Bank debits (thousands)	$ 20,001	— 15	+ 4
End-of-month deposits (thousands)‡	$ 12,243	**	+ 8
Annual rate of deposit turnover	19.6	— 16	— 1
Employment (area)	53,000	**	+ 4
Manufacturing employment (area)	10,720	**	— 3
Percent unemployed (area)	7.0	+ 8	+ 19
TOMBALL (pop. 1,713)			
Building permits, less federal contracts	$ 4,000	— 50	+167
Bank debits (thousands)	$ 6,167	— 17	— 6
End-of-month deposits (thousands)‡	$ 6,117	— 6	— 7
Annual rate of deposit turnover	11.7	— 8	— 1
TYLER (pop. 51,230)			
Retail sales	— 2†	— 13	— 12
Automotive stores	— 10†	— 18	— 9
Florists	.....	+ 11	— 11
Postal receipts	$ 92,528	— 20	+ 1
Building permits, less federal contracts	$ 889,779	— 73	**
Bank debits (thousands)	$ 80,041	— 9	— 5
End-of-month deposits (thousands)‡	$ 61,595	+ 3	+ 6
Annual rate of deposit turnover	15.8	— 10	— 9

City and item	Apr 1961	Percent change: Apr 1961 from Mar 1961	Percent change: Apr 1961 from Apr 1960
UVALDE (pop. 10,293)			
Building permits, less federal contracts	$ 75,414	— 32	— 2
Bank debits (thousands)	$ 8,558	— 5	— 4
End-of-month deposits (thousands)‡	$ 8,462	+ 4	+ 12
Annual rate of deposit turnover	12.4	— 7	— 12
VERNON (pop. 12,141)			
Postal receipts*	$ 10,184	— 25	**
Building permits, less federal contracts	$ 176,965	— 16	+ 18
Bank debits (thousands)	$ 12,284	— 9	+ 8
End-of-month deposits (thousands)‡	$ 19,133	+ 1	+ 5
Annual rate of deposit turnover	7.7	— 9	+ 1
VICTORIA (pop. 33,047)			
Retail sales	— 2†	— 6	— 3
Automotive stores	— 10†	— 11	— 9
Food stores	— 3†	— 5	+ 4
Furniture and household appliance stores	— 1†	+ 3	— 6
Lumber, building material, and hardware stores	— 2†	+ 1	+ 10
Postal receipts*	$ 31,001	— 4	— 4
Building permits, less federal contracts	$ 417,350	— 24	+ 68
Bank debits (thousands)	$ 51,333	— 4	+ 12
End-of-month deposits (thousands)‡	$ 73,052	— 2	+ 3
Annual rate of deposit turnover	8.4	— 2	+ 8
WACO (pop. 97,808)			
Retail sales	— 2†	— 10	— 20
Apparel stores	**†	+ 11	— 22
Florists	.....	+ 8	+ 3
Furniture and household appliance stores	— 1†	+ 1	— 16
General merchandise stores	— 4†	— 13	— 22
Lumber, building material, and hardware stores	— 2†	**	— 13
Postal receipts*	$ 152,817	+ 7	— 3
Building permits, less federal contracts	$ 1,384,495	— 60	+ 70
Bank debits (thousands)	$ 110,315	— 4	+ 5
End-of-month deposits (thousands)‡	$ 74,099	+ 7	+ 10
Annual rate of deposit turnover	18.5	— 7	— 2
Employment (area)	47,600	**	— 1
Manufacturing employment (area)	9,790	**	— 4
Percent unemployed (area)	5.3	— 5	+ 10
WAXAHACHIE (pop. 12,749)			
Postal receipts*	$ 20,565	+ 1	**
Building permits, less federal contracts	$ 14,250	— 80	— 78
Bank debits (thousands)	$ 7,984	— 7	— 12
End-of-month deposits (thousands)‡	$ 9,249	+ 4	— 17
Annual rate of deposit turnover	10.5	— 13	+ 8
WESLACO (pop. 15,649)			
Retail sales			
Automotive stores	— 10†	— 25	— 11
Postal receipts*	$ 7,927	— 15	— 6
Building permits, less federal contracts	$ 87,575	+ 25	+ 80
WICHITA FALLS (pop. 101,724)			
Retail sales	— 2†	+ 5	— 4
Apparel stores	**†	— 3	— 24
Automotive stores	— 10†	+ 18	— 10
Drug stores	— 3†	— 6	— 1
Furniture and household appliance stores	— 1†	+ 4	+ 11
Postal receipts	$ 106,004	— 10	— 7
Building permits, less federal contracts	$ 1,404,710	— 29	— 55
Bank debits (thousands)	$ 114,691	— 5	+ 1
End-of-month deposits (thousands)‡	$ 94,942	— 2	— 3
Annual rate of deposit turnover	14.4	— 4	+ 4
Employment (area)	44,300	+ 1	+ 8
Manufacturing employment (area)	3,640	+ 2	— 1
Percent unemployed (area)	4.5	— 8	— 13

BAROMETERS OF TEXAS BUSINESS

All figures are for Texas unless otherwise indicated. All indexes are based on the average months for 1947–49, except where indicated; all are adjusted for seasonal variation, except annual indexes. Employment estimates are Texas Employment Commission data in cooperation with the Bureau of Labor Statistics. The index of Texas Business Activity is based on bank debits in 20 cities, adjusted for price level. An asterisk (*) indicates preliminary data subject to revision. Revised data are marked (r).

	April 1961	March 1961	April 1960	Year-to-date-average 1961	Year-to-date-average 1960
GENERAL BUSINESS ACTIVITY					
Texas business activity, index	224	239	223	231	227
Miscellaneous freight carloadings in SW Dist., index	81	76	83	75	81
Ordinary life insurance sales, index	376	383	403	383	403
Wholesale prices in U.S., unadjusted index	119.4	119.8	119.7	119.8	119.6
Consumers' prices in U.S., unadjusted index	127.5	127.5	126.2	127.5	125.7
Business failures (number)	62	59	37	56	38
Newspaper linage, index	161.2	168.6	171.5	163.7	174.4
TRADE					
Total retail sales, index, 1957–59=100	99.8	104.1	109.9	.....	.....
Durable-goods sales, index, 1957–59=100	93.3	97.2	105.2	.....	.....
Nondurable-goods sales, index, 1957–59=100	103.1	107.6	112.3	.....	.....
Ratio of credit sales to net sales in department and apparel stores	70.1	73.1	69.9	72.0	72.0
Ratio of collections to outstandings in department and apparel stores	30.1	38.9	33.1	35.9	37.3
PRODUCTION					
Total electric power consumption, index	389*	363*	394r	376*	383r
Industrial electric power consumption, index	377*	343*	413r	357*	395r
Crude oil production, index	106.8*	105.8*	108.2r	107.3*	113.1r
Crude oil runs to stills, index	152	150	147	152	146
Industrial production in U.S., index	159	155	165	156	166
Texas industrial production—total index	175	175	174	173	173
Texas industrial production—manufacturing index	220	217	220	217	215
Texas industrial production—durable goods, index	258	252	252	252	249
Texas industrial production—nondurable goods, index	202	201	206	200	199
Texas mineral production—index	132	135	129	132	133
Average daily production per oil well	13.3	13.5	13.1	13.4	13.8
Construction authorized, index (1957–59=100)	96.7	115.9	97.3	102.8	99.6
Residential building (1957–59=100)	93.8	94.6	97.2	87.8	97.3
Nonresidential building (1957–59=100)	99.9	151.1	95.0	124.1	103.6
AGRICULTURE					
Prices received by farmers, unadjusted index, (1910–14=100)	252	248	248	250	245
Prices paid by farmers in U.S., unadjusted index (1910–14=100)	302	302	302	302	300
Ratio of Texas farm prices received to U.S. prices paid by farmers	83	82	82	83	82
FINANCE					
Bank debits, index	267	286	267	276	271
Bank debits, U.S., index	240	246	235	246	238
Reporting member banks, Dallas Federal Reserve District:					
Loans (millions)	$ 2,994	$ 3,045	$ 2,882	$ 2,999	$ 2,851
Loans and investments (millions)	$ 4,897	$ 4,867	$ 4,507	$ 4,848	$ 4,455
Adjusted demand deposits (millions)	$ 2,704	$ 2,743	$ 2,663	$ 2,714	$ 2,645
Revenue receipts of the State Comptroller (thousands)	$146,795	$118,123	$143,795	$112,701	$110,554
Federal Internal Revenue receipts (thousands)	$349,525	$213,359	$335,601	$299,175	$289,074
LABOR					
Total nonagricultural employment (thousands)	2,503.1	2,484.8	2,511.6	2,485.9	2,485.7
Total manufacturing employment (thousands)	480.8	480.4	491.8	480.0	489.6
Durable-goods employment (thousands)	228.8	227.9	235.8	227.1	233.4
Nondurable-goods employment (thousands)	252.0	252.5	256.0	253.0	256.2